

# THE KEYSTONE

A MONTHLY JOURNAL FOR THE JEWELRY TRADE

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## CERAMICS.

THIRD CHAPTER OF THE PAPER BY  
PROFESSOR BROOME.

Which treats of Cloisonne, Pate sur Pate,  
Underglaze Painting and Painting  
in Enamel Colors.

The cloisons, with filigrines of copper, are made in the same manner upon faience and porcelain as upon copper vases or plaques. The design is first traced upon the piece to be decorated; the delicate pieces of thin copper are then clipped, placed upon the lines of the design, and fastened in their place by means of solder or glaze fused upon the surface. The cavities are afterwards filled with colored enamels placed so as to admit of the escape of carbonic acid during the process of fusing in the kiln. These cavities are repeatedly filled and fused until a proper thickness has been given to the enamel, when the whole surface is ground off and polished upon the lapidary's wheel. The brightness of the copper cloisons is permanently maintained by subsequent gilding.

This art is much in vogue at present. Hundreds of thousands of dollars are expended annually for objects of luxury in this style. It forms one of the most exquisite decorations of Ceramic art, being used on plaques and vases, in conventional ornaments, floral designs, and birds of plumage, rendered from the nature of the work in flat tints, delicately outlined with gold. The Japanese especially excel in this kind of Ceramic. Many exquisite works are also made in China and France.

The art of cloisonne, with the exception of the kind made by Bennett of New York, the Lambeth, or properly speaking, Colinet style, as an article of manufacture has not reached our shores.

It would be impossible to present to your minds the wondrous beauties of this art. We are obliged to supply that want by the exercise of the imagination, keeping always within the strict limits of fact. Many treasures must be rapidly passed with only a glance at their leading features. Before parting with the warm glow of art life as here represented, we must view for a moment the long row of faïences yet before us.

Leaving the cloisons of every variety, let us consider this shaded enamel vase. We find its decoration produced by a tracery of raised work modelled upon the surface. The colored glaze has, by the action of heat become thin on the high parts, and appears lighter in color than that in the cavities where the glaze has deposited itself thickly, thus giving a colored shading to the carved or modeled surface, in tones running from a warm grey richly shading to brown.

The principal difficulty in this kind of Ceramic manufacture is to keep the forms evenly shaded by preventing the glaze

from running in drops or thick masses, thus destroying the beauty of the design. This results from being unable to place certain pieces in the kiln in a horizontal position. A plaque is less susceptible to this defect, because it lies flat in the baking kiln. Consequently finer gradations can be given to relief ornaments on flat objects.

We will now consider the species of decoration called Godde grounds, from the name of the inventor, consisting of a coating of enamel upon the plain surface of a vase. It presents a slightly relief surface, resembling a worm-like tracery,

ancient potteries of Rouen and Nevers. They have perfectly imitated the pipe clay wares decorated in blue, light and dark yellow, with touches of brown, which, once seen, are not easily forgotten, and were so renowned in past ages; adapting the best and choicest designs of the different successful schools of Ceramic art since the renaissance in Italy and France down to the epoch of Louis XV. and Louis XVI.

Pate sur Pate is the mode of placing (mostly by aid of a brush) a paste of one color upon another. Generally the body of the piece to receive the decoration is

artists, Damhouse is considered best of all.

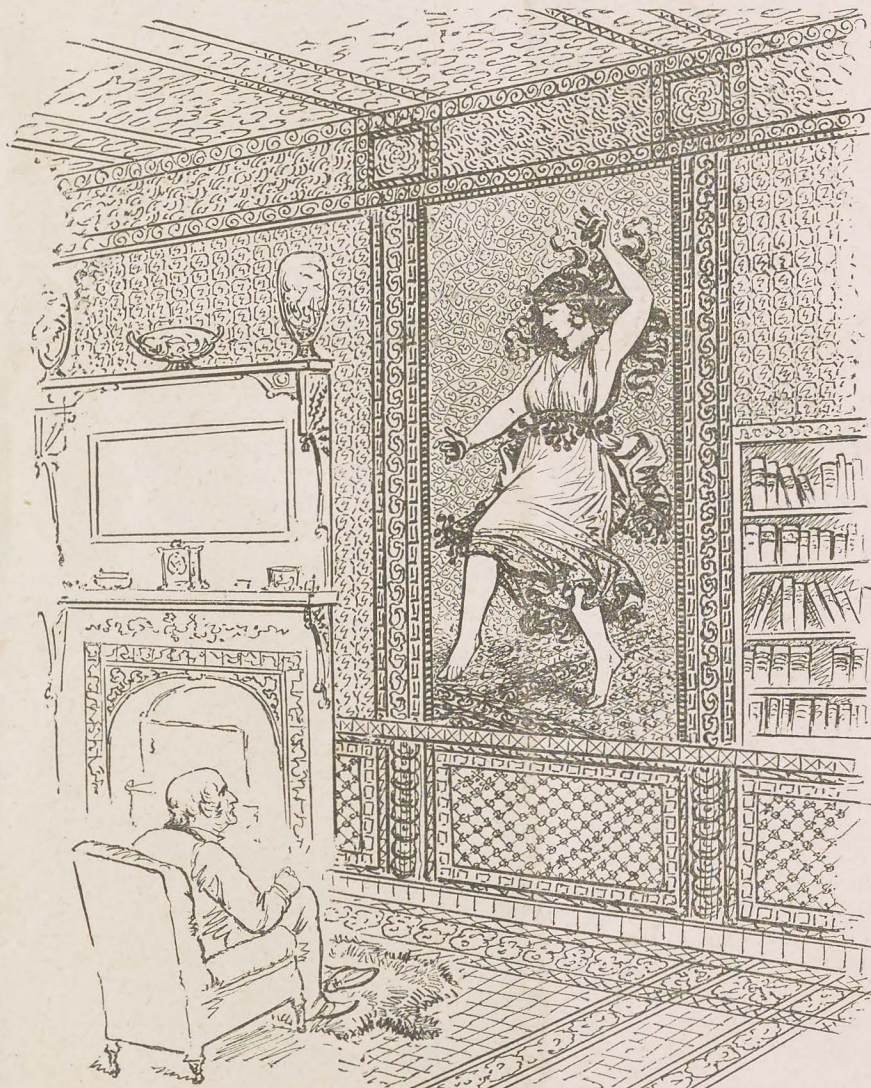
This pleasing sculptural style of art has been usually applied to figure decorations associated with ornaments; The designs being mostly of cherubs and pretty women. It far exceeds the applied reliefs of famed Wedgwood, each piece being necessarily an original work by the artist, hence possessing greater value.

Two colored statues in faience, one semi-colossal of Henry IV. of France, by Deck, and one life-size by Vielliard, of Bordeaux, attracts us. The former is made with the legs in separate pieces, firmly and artfully joined together. The great monarch stands erect without the usual support, arrayed in the picturesque costume of his time, a close fitting embroidered vest, with full trunks, tight stockings, and buckled shoes. Upon his head, the high felt hat turned up in front, straight sword at his side, and over his shoulders is thrown the short mantle. The whole statue is colored with enamels to appear life-like, and presents a feature in chromatic sculpture entirely new. The effect is highly agreeable to the eye, for the style attempts rather the naturalistic than the classic, admitting the addition of color.

The latter work by Vielliard is an erect figure of a negress in long, parti-colored robes, carrying a pot, or vase of flowers upon her head. The statue is executed in one piece, including the vase, and it is in this respect, the most perfect work of its kind ever made. The whole is colored with colored glazes after the manner of majolica. Artistically, the work is of a high order. As a specimen of ceramic sculpture, it must be admitted also to a high place in decorative art.

The transparent glazes called varnishes, are also used for the style of decorated faience called underglaze painting, which consists of colors selected and hardened to withstand the action of heat applied upon the biscuit or dry ware before it has been glazed. Over these colors the glaze is spread, and the wares are then fired in the kiln. The firing fuses the transparent glaze upon the surface of the colors, producing a magnified appearance and rich depth to the color underneath that can not be described. By this means, we have charming productions, such as bouquets, garlands of flowers, ornaments upon vases and plaques executed by a few skillful artists, surpassing in beauty any other production of man. Decorations refreshing as the cooling breezes of early spring, drawn from the sources of bright beautiful nature, who speaks to all her children with one voice, and greets them with an universal smile. The color transcends in dewy richness even the plumage of tropical birds, lusted insects, or the gems of Golconda's mine. The shimmering light upon the undulating forms produces an effect of dazzling beauty.

The choicest specimens of this style of art have found purchasers in America,



Underglaze Painting on Tiles.—By Broome.

so regular that it appears to be delicately carved. Yet this effect is produced by chemical action under the influence of heat. Certain ingredients are introduced into the enamel coating, causing it to form itself in this very regular manner upon the surface. The color is generally a light turquoise, and the effect is one of the most delicate and agreeable imaginable. The Japanese produce a number of cheap small wares on this plan, such as teapots with a brown, crispy, vermicular covering, which can be found in our American bazars.

The products of Gien since 1867 in artistic faïences recall to us the styles of the

covered with a colored engobe of dark Sevres blue, or with a celadon tint, sometimes a brown. This colored surface is painted with a paste that becomes transparent in the baking. The work, which is in reality a slightly modeled relief, remains white in the thick parts, while the thinner portions receive a graded tint from the under color, varying in depth according to thickness. The process is very simple. Solon, formerly of the National Factory at Sevres, and subsequently connected with Minton's in England, is greatly distinguished in this branch. Pouyat and Gibus and Redon in France are also highly prominent. But among

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through the enterprise and taste of Caldwell, of Philadelphia, who bought almost the entire lot of choice ceramics at Paris, in 1878. Nowhere have I seen as many choice works as in his establishment. In selection, I judge this gentleman (personally unknown to me) to be the first in the world.

America is really the support of the ceramic art in France. Whatever may be said of us as rude Western barbarians, or our lack of politeness, one thing is certain, the polished nations find us princes in taste, for we take their best productions.

Underglaze painting is simply a mode of retaining a certain number of colored metallic oxides from being changed in the baking furnace, by incorporating them with non fusible materials, and covering them with a glaze prepared so as not to act upon the colors, to spread them or effect their tone.

So attractive is this branch of ceramics, that the first impulse of amateurs is to rush into it. I have known many who could not draw or paint at all, upon anything, spend an infinite amount of valuable time and treasure to try and achieve this exceedingly difficult branch of art, without success of course.



PASTORAL VASE.  
By BROOME.

The most beautiful underglaze vases I ever saw were painted by Chas. Houry. The style is better suited to designs admitting of broad effect. Deck and the Giorni factory have produced a number of large heads skillfully managed in their technic, and of high artistic beauty, one having the ground laid in underglaze gold. These form a pleasant variety, associated as they are with the cloisonne enamels of picturesque figures of renaissance times, flowers and birds that glow with golden yellows, purples, rubies and peacock blues.

Admitting greater extension than any other branch of ceramic art, capable of producing almost all the effects of oil or water color, is the art of painting in enamel colors. This style of work is executed upon the surface of the glaze and requires for its success, a certain training in the manner of combining the colors and of laying them on the smooth glassy surface, so that they may have the desired effect upon issuing from the enamel kiln, where they are burned upon the surface of the glaze. The effects of almost every other kind of ceramic painting can be obtained in this manner. It is particularly suited to fine paintings of figures, miniatures or floral designs that require exquisite shading and coloring. Indeed, the smallest and finest, as well as the largest and broadest effects are obtainable by its means. The colors are mixed with preparations of turpentine, and applied with the pencil. Although used upon ordinary pottery, its choicest effects are only attained when applied upon an art faience having a glaze composed so as to give the colors additional brilliancy. The old Sevres soft paste porcelain achieved this latter quality in the highest degree. The colors appear imbedded in its rich glaze, and have a depth of effect similar to underglaze painting. For some reasons,

the art of old Sevres has been lost or abandoned. Machereau, however, has revived it. His productions of ideal compositions mostly of the style of Louis XVI., possess the charm of the ancient works with certainly a better style of art.



CENTENNIAL VASE.

This kind of enamel painting is attended with great risk. For a good result the piece requires six or seven firings, the last being the most uncertain of all.

Observe the rich depth of tone obtained in the blue and turquoise grounds, the strength and tone of the painting, and the beautiful gloss furnished by the enamel. These products are all mounted with carefully chiseled bronze, gilded by the old mercurial process. Here is a vase with original paintings by Fragonard. Another mounted with gilt bronze, gracefully painted by Labarre. Another, with a ground of king's blue, painted by Grisons in the Bergheim style, with landscapes animated with animals. A large coupe jardiniere, ground of king's blue, painted by Labarre, in the style of Clodion. Others beautifully mounted are painted in the style of Wouvermans, Vernet, Prudhon, and Greuze.

Here we have a number of articles for polychrome decoration, consisting of mounted clocks, card plats mounted in gilt bronze and citron wood, small cups and miniature copies of the works of masters, and a variety of garnitures for ladies' toilette and chimneys.

Enamel painting with us is mostly put upon hard porcelain, because its body and glaze is free from the many vices art faience is subject to, on account of the ignorance of manufacturers who know not how to compose a suitable accipient for the colors. Hard porcelain will scarcely admit of the numerous paintings and firings necessary to produce a highly finished work. A good art faience, or even a soft paste porcelain is desirable in an epoch like our own, when enamel painting is becoming universal.

Were it possible to excite the imagination to a point where it could conceive the long array of choice enamel paintings produced during the last two centuries, what a pleasurable feast for the mind would it be. The surfaces of vases and plaques would give us an imperishable historic record of the life, manners and tastes of people now passed away. It would also give us the poetic thought that changes not with the fashion or folly of the time, but is ever constant with the human mind; bright, fresh and green, pervading the soul with a joyous youth beyond all reach of pain or worldly strife. But for its blessed charm, life would be savage and dull; a matter of eating, sleeping and gaining. The student or thinker is maintained by this manna from a heaven beyond the reach of the despoiler. Without the ideal, civilization would be worthless, life without charm. Faith would lose her treasure, hope her anchor, and charity her sympathy. Beauty would bloom in vain; a savage blackness would cover the hearts of all mankind.

IN BERMUDA.—Poetic Caller (who has come down on last steamer)—What is that balmy, spicy odor that wafts in at the casement, and seems to send the new life spinning through my sluggish Northern blood?

PRACTICAL CALLER (who has been there three weeks)—Onions.—*Tid-bits.*

#### SEWING WITH FINE WIRE.

A way to make garments that wont rip.

A sewing machine has just been invented which uses a very fine steel wire for thread and makes any garment sewed with it absolutely unripable. The *Cleveland Press* says of it: "We do not pretend to be a standard authority on sewing machines, but we have no hesitation in declaring this to be a great stride forward, since the days when an agent with a well oiled, rapidly revolving tongue, and a voice like the robin's morning song, forced our maternal ancestor to buy a sewing machine to prevent being talked deaf, dumb and blind. This was many years ago, but some of the incidents resulting therefrom have left our memory deeply scarred with occasional acute, sharp, shooting pains wandering through it, even to this day. The machine had a patent automatic catch-as-catch-can stitch and sewed with a single thread in a way that was childlike and bland, but misleading."

The rapidity with which it wandered over a section of cloth filled our parent's heart with joys and ambitions. We had just got over that trying time in every boy's career when his mother insists upon her right to act as his barber. She no longer pinned a bed sheet around our neck, pushed our head forward until all the blood in our body settled in our face, and then, with one hand full of shears and the other full of combs, began, halfway down our spine, to cut the hair out of the back of our neck, stopping occasionally as she drew near the top of our youthful dome of thought to wildly chase an imaginary zoological specimen through our wavy ringlets with a fine tooth comb. She no longer did these things. Her heart no longer swelled with pride at the result of her handiwork, as she watched us canter down the street with our back hair looking as though it had been bitten off by a mad dog and afterwards licked down smooth and slick by a sympathetic cow.

Those days were past, and in their stead had come the days when she was filled with an intense, overpowering yearning to make over our male parent's pants so as to fit the lower half of our anatomy. When we inserted our symmetrical but spirituelle form in papa's pants, even the most diseased imagination could not conceive of them being a perfect fit, although we appeared to be having one. The waist band of the pants reached twice around our form. The ceiling trailed along on the ground and we looked as graceful as an ice wagon generally. There was considerable making over to be done.

With a firm determination to succeed and a pair of shears, our mother finally trimmed them down to the right size and sewed up the seams on her new-fangled machine. The next Sunday we walked proudly forth, with the newly-adjusted pants on, amid the mutual congratulations and plaudits of the entire family. While seated in a crowded street car, with one foot thrown carelessly over our knee, we noticed a loose thread sticking out from the bottom of our pants leg. We were dainty and pants-proud in those days and the loose thread annoyed us, so we reached down to pull it out.

It came out very readily. It was a nice looking wavy thread, and we were somewhat surprised at the length of it, but we pulled and pulled until we finally succeeded in breaking it off. Shortly after, we became conscious of a commotion in the car. The face of the pale young lady sitting opposite, had suddenly become fiery red. A couple of elderly-looking ladies next to her were poking each other in the ribs, while they giggled and blushed behind their fans. The men folks all grinned through their whiskers, and one little, fat, bald-headed man was just rolling off his seat in a paroxysm of mirth, when the conductor caught him.

ling off his seat in a paroxysm of mirth, when the conductor caught him.

We were about to join in the general laugh, without knowing what it was about, just to appear sociable, when we suddenly became imbued with a chilling suspicion that there was something the matter with our pants. Looking down, our soul began rapidly recoiling with horror at the sight that greeted us. We had pulled the thread out of the inside seam of one pant leg, and there we sat with our bare leg hanging in graceful festoons over our left knee. With remarkable self-possession, we immediately jumped off the car, without waiting for it to stop, but as we walked briskly home through the crowded thoroughfares, with one pant leg looking like the large flowing sleeve of a lady's cloak flopping idly about our naked limb every time we took a step, and meeting everybody we knew and didn't want to see, we felt slightly embarrassed.

As our bare leg shot passed them the startled and pained look in the eyes of some of the society belles, and the howls and hoots of the street gamins jarred on our sensitive nervous organization. In view of these facts and experiences, we joyfully hail the advent of the new machine which sews clothing with steel wire as the first faint glimmer of the dawning of that bright and glorious day when the seams of men's pants shall be fastened together with boiler rivets.

#### FURNITURE MADE OF BRASS.

When the popular taste began some time ago to lean toward articles made of brass, many persons laughed at what they called a spasm, and said it could not last long, but if the trade done in this line of goods is anything to go by, the craze is increasing. Popular taste, in fact, is running riot in this regard. Fancy woodwork, so popular a year or so ago, is practically out of the market. Not only is this metal used in the manufacture of bric-a-brac and ornamental pieces, but in many of the recently built dwellings, it constitutes much of the practical and substantial appointments. For portieres, mantel facings, and stair casings, polished brass has been in common use for some time, but it was not until recently that it took the place of softer and less expensive materials in the manufacture of panelings for doors, sills, baluster rails, balconies, and the like. Its use in the manufacture of household articles has knocked a good sized hole in the furniture business, for a portion of a dwelling can today be furnished in brass, from the kitchen poker up to a child's swinging crib. To the designs, patterns, and shapes of the various articles made of this metal, there seems to be no end. The appearance of a room is greatly enhanced by a brass easel, as is also the looks of the picture to which it gives support. The number of articles made of brass runs up into the thousands already—and the end is not yet. Shaving stands, wall pockets, fire-screens, and such things exist in countless varieties. The most popular conceits are the umbrella stand, usually made in hammered goods, circular in form and about a foot in diameter; coal scuttles, used chiefly by people who have open fireplaces and grates, to stand beside the fireplace; match boxes, whisk broom holders, ash receivers, and hall racks in polished oak with brass mountings. Small thermometers or clocks are sometimes set in the head of a tennis racket. The latest card picture-holder is made of brass in the semblance of a flatiron. It is in the appointment of a house, however, that the craze is now mostly seen, and builders and architects generally are puzzling their brains trying to find new places and new uses to which they can put the metal, and are thus coming nearer and nearer to what is said will one day be a house of brass.—*New York Express.*

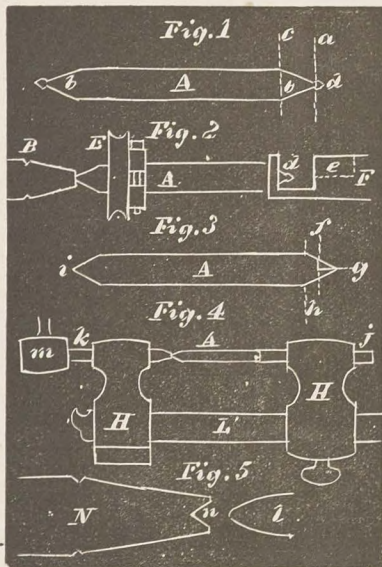


## THE BOW LATHE.

A PRACTICAL TREATISE BY OUR WATCHMAKER.

Second of a series of interesting letters on the management of this machine so useful to the trade.

The pointed steel wire spoken of in last issue and illustrated at Fig. 5 in that paper is reproduced at Fig. 1. In turning such a piece, the conical surface *b* between the lines *a, c*, should be turned as accurate as can be done with the steel centres which come with the lathe. After the cone *b* is turned as true as possible, it should be smoothed with a pivot file, and finished with a burnish file. This course is to be pursued with both ends of *A*. We next place a screw collet *E*, Fig. 2, on our steel wire *A* as shown. In our April



number, we described the preparation of a brass centre and illustrated its shape at Fig. 4; we show this brass centre again at Fig. 2. We have now opened out the hole in the end at *d*, to admit the conical point of *A* as shown. If now, we apply the bow to the screw collet *E*, we can turn up the extreme point of *A* at *d*, to a perfect or near perfect point with a graver as the hole in *F* makes a firm and secure bearing for the turned part of *A* at *b*. We turn and finish the point on each end of *A*, as shown in Fig. 3. The object of making *A*, is to perfect the centres of our bow lathe; and we have now got *A* to nice clean and approximately perfect conical points. We want now to file away half of one of the conical points as shown at the dotted lines *f, g*. This can be done by filing the brass centre, *F*, as shown at the dotted line *e*. A good deal of care should be exercised in filing to exactly cut away half of the conical point, as most of the extreme accuracy of the centering depends on the care used in fitting the points of the piece *A*. After the points of *A* (one perfectly conical and the other half cut away to form a conical countersink) are perfected, they should be hardened to the temper of a good drill. We now soften our steel centres, and place them in the lathe, and with the half cut away point *g*, slightly drill or countersink all of our centres. After this is done, take one of our brass centres and recess it enough to receive the point *g*, so the undisturbed cone from *f* to *h* will rest on the countersink. With a mallet, drive each and every center against *i*, (after countersinking with *g*) until as near a perfect hollow cone is established as possible. This is done as shown at Fig. 4, where *H, H*, represents the lathe heads, *A*, the steel piece we have just fitted up; *j*, the brass centre; *k*, the centre we are fitting the end to; and *m*, a mallet. After all of our steel centres have their hollow cones perfected, they should be rehardened and left *file hard* to prevent wear. In hardening, the hollow cones should be protected by a paste of carbonate of potash (sal tartar) and water to prevent oxidiza-

tion. The hollow cones as shown at *n*, Fig. 5, should be polished with pegwood, diamantine and alcohol. All of our pieces to be turned like staffs, cylinders, and pinions will be shaped comparatively like *l*, Fig. 5, and will run true and steady in a centre shaped as shown in Fig. 5, where *N* shows a bow lathe centre magnified. We have now our centres in shape to commence to turn, and do a job we can be certain of. And the first essay must not be a staff or cylinder, but simply a piece of steel hardened and tempered to a hard spring temper. Most of the material we have which is imported, is too soft for service; this is done so it will turn easily, but the wearing parts of a watch should be as hard as an ordinary case spring. This temper is obtained by heating a piece of steel to a pale cherry red and immersing in water or oil, the latter making the toughest temper. The piece now is too hard to turn, and we shall have to reduce the temper by partial annealing. This can be done by judging of the color or by an oil bath. It is well to know both methods. We should keep in mind that all hard tempers like cutting tools, drills, etc., are best judged by color, as in the table below; while the temper for springs or parts to be turned are best judged by the oil method. I shall divide the color method into seven stages, and if the instructions are properly lived up to, you need no better system.

1. Pale straw for drills for brass, etc.; 2. Dark straw for drills for brass; 3. Brown for screws, ratchets, and bright steel work; 4. Violet, pigeon blue, as some call it; 5. Positive blue for screws etc.; 6. A greenish blue; 7. A coppery hued blue for the true spring centre.

The first five shades all persons have no difficulty in judging, but I have found many persons with whom it seemed very difficult to get at and accurately judge the last two shades, though to me nothing seems more simple. For experiment in this, take an old case spring and with an emery buff, brighten a portion. Then hold over a lamp and watch the colors come as described above, taking particular care in observing the last two named. If after several slow trials, you fail to make the distinctions, which, to those who can judge of the shades, are as positive and marked as the first two, give up the color method for spring tempering, and take the oil or bees wax test. The color tempers as given above correspond to the numbers below.

1. Slight smoke, just see it; 2. A little more smoke; 3. Smoking freely; 4. Dark smoke; 5. Smoke will catch fire and flash; 6. Oil retains the fire and burns; 7. All the oil or bees wax burned off.

An old spoon or iron dish serves as an oil bath. Bees wax is as good every way as oil, and does not produce such an abominable stench as oil. Olive or lard oil should be used, but not any of the so-called mineral oils. As good a trial piece as we need for getting our hand in on turning is to point up a piece of steel wire like Fig. 1. We do nothing to the conical ends but file them, as we have now our centres in good shape and the conditions insisted on in April number will be realized. We put a screw collet on our hardened and tempered piece, and with a small cat gut bow. It is well to consider this subject (the bow) to some length, as it is of importance. Whale bone makes the bow *par excellence*, but in this day it is difficult to get a good one. In all cases where a hair bow is used, it should be of whale bone. The larger ones using gut can be of metal. We shall not have space to consider the turning of our bit mittent effort, the tool or graver cutting of steel wire except in an abstract sense in this article, but leave the details for our next interview. All workmen know that turning with a bow lathe is an inter-only when the bow is drawn down. It requires a great deal of practice to do this

successfully, as the graver, to do its work to the best advantage, should be ready to commence cutting the instant the bow starts to revolve the piece to be turned in the proper direction. To do this the graver is given a sort of rocking motion over the tool rest, that requires a great deal of practice to do properly, as it is necessary the graver should be moved away from the piece to be turned, precisely at the time the bow starts to go on its return movement. And it is equally important that the graver should be ready to cut as soon as the bow starts on its downward movement. The best way to learn this double motion is to take the matter very slow, putting the piece in the lathe, taking the bow in the left hand and the graver in the right. Pull the bow slowly down, cautiously advancing the graver until a chip is established. Continue the downward motion of the bow holding the graver so a proportionate chip is removed during the entire downward draw of the bow. Before any return movement of the bow is made with a rocking motion, raise the graver away from the job. Going slow is the true way to get at the proper method.

(To be continued.)

## A WORD TO YOUNG MEN.

It is as easy to be a rich man as a poor one. (Half the energy displayed in keeping ahead that is required to catch up when behind would save credit, give more time to attend to business, and add to the profit and reputation of those who work for gain.) Honor your engagement. If you promise to meet a man or to do a certain thing at a certain moment, be ready at the appointed time. If you go on business attend promptly to matters on hand, then as promptly go about your own business.

Do not stop to tell stories in business hours. (If you have a place of business be found there when wanted.) Never "fool" on business matters. Have order, system, regularity, liberality, promptness. Do not meddle with business you know nothing of. Never buy an article you do not need, simply because it is cheap and the man who sells it will take it out in trade. Trade is money. Strive to avoid harsh words and personalities. Do not kick every stone in the path; more miles can be made in a day by going steadily on than by stopping to kick. Pay as you go. A man of honor respects his word as he does his bond. Aid but never beg. Help others when you can, but never give what you cannot afford to, simply because it is fashionable. Learn to say "no." No necessity for snapping it out in dog-fashion, but say it firmly and respectfully. Have but few confidants, and the fewer the better. Use your own brains rather than those of others. Learn to think and act for yourself. Be vigilant. Keep ahead rather than behind the time.

THE increase in the number of persons using glasses is fully 33½ per cent. over previous periods. I speak, says a St. Louis dealer to a reporter, from an experience of over thirty years. I attribute this increase partly to the practice people have of buying spectacles from dealers who are unskilled in fitting them properly to the eyes of those who buy them and partly to the false economy by many in using spectacles whose only recommendation is their cheapness. In St. Louis, fifteen years ago, there were only three men engaged in the business of making and selling optical instruments, and these barely made a living out of it. Now, there are fifteen in that line, and ten of them have all they can do.

CARDINAL GIBBONS has sent from Rome a valuable cameo ring as his contribution to a church fair soon to be held in Baltimore.

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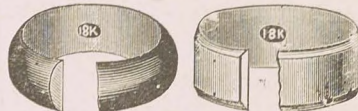
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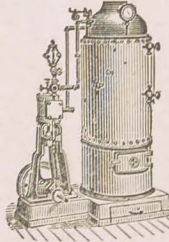
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Steel Boiler. Cost of running  
guaranteed not to exceed  
one and one-half cents per  
horse power per hour. Less  
than half that of any kero-  
sene engine of equal effi-  
ciency. Nothing equal to it  
ever before offered for the  
price. Send for free descrip-  
tive circular.  
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ALBANY, N. Y.

Repairing Department Attached.

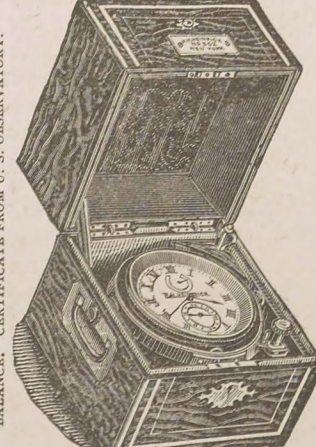
Tools, Material, Etc.

Price List to the Trade.

H. H. HEINRICH,  
CHRONOMETER MANUFACTURER,

No. 14 John Street, New York.

MARINE CHRONOMETER WITH HEINRICH'S ADJUSTABLE BALANCE. CERTIFICATE FROM U. S. OBSERVATORY.



Agent for the K. Zimmerman Watches and Palladium Balance Springs for Marine Chronometers.

CHRONOMETERS TO RENT. \$5 per month.  
In order to give an opportunity of examining and testing my Chronometers, I will rent them out at the rate of \$5 per month, payable in advance. To those desiring to purchase chronometers, after examining them, an allowance of the first month's rent will be made from purchasing price.  
A large stock of new and second-hand Marine Chronometers on hand for the Trade. All my second-hand chronometers are in the very best condition, are re-adjusted, and look like new.  
Springing and Adjusting a Specialty.



## THE KEYSTONE

A monthly journal for the jewelry trade, published at Nineteenth and Brown streets, Philadelphia. Price, 25 cents a year, in advance.

THE KEYSTONE has a bona fide circulation of 22,000 copies.

ADVERTISERS say that it is the best medium to reach trade that they ever saw

THE KEYSTONE reaches every Jeweler in the United States and the Dominion of Canada.

CORRESPONDENCE, and other copy for publication, should reach the KEYSTONE before the first of the month.

TO SECURE a place in the columns of the KEYSTONE, advertisers should forward copy so that it may reach us not later than the 8th of the month.

ADVERTISEMENTS under the heads FOR SALE—HELP WANTED—WANTED and SPECIAL NOTICES are three cents for each word, and no charge less than twenty-five cents

ADVERTISING rates for column, double column, quarter page, half page, and full page advertisements furnished on application at this office.

Circulation 15,000 larger than that of any other journal of its class, reaching every jeweler in the United States and Canada.

Address all communications to

THE KEYSTONE,

ROBERT W. ROBINS, Publisher,

Nineteenth and Brown streets,

Philadelphia, Pa.



A Monthly Journal for the Jewelry Trade.

PHILADELPHIA, MAY, 1887.

### FIFTY DOLLARS IN PRIZES.

As there seems to be a craze among the trade for monogram designs, the KEYSTONE, after quiet consideration of the matter concludes to offer three prizes for monogram designs and specimens. The reasons for doing so, are to secure original designs, and what is more important, variety. Any who have given the subject attention, will admit that no matter how versatile a designer may be, he soon begins to repeat. He has certain forms, which he uses with little variation. This does well enough in the routine of the shop where his monograms on watch-cases, lockets, ice-pitchers and drinking-cups, each go into the hands of a different customer. But let the same man though twice as ingenious in design, set himself to combining a series of letters in twos and threes, from A to Z, and his sheets will soon begin to show a sickening family resemblance. The first idea of the Keystone was to engage twenty-six first class designers, to each designer a given letter and its combinations, but a better thought came, which was to offer a prize to any and all of our readers to compete in designs of monograms, A, B, C and D, in combinations with other letters of the alphabet, forming the first series.

This then is the plan: The series will begin with the June number, and end probably with the November issue.

One or more designs will be published with each number, giving each artist full credit for his work. When the series closes in November, each subscriber to the KEYSTONE will receive through the mail a ballot on which will be printed, 1st, 2d, and 3d prize. Opposite each he may write the name of the artist he favors, and return the ballot to the KEYSTONE. By the time the January number is issued, the returns will probably be all in, and the artist receiving the highest number of votes will receive the 1st prize of \$25; the next highest the 2d prize of \$15, and the next highest, the 3d prize of \$10.

Mr. W. F. A. WOODCOCK, formerly of Circleville, O., has removed to Winona, Minnesota, liking that place better than Minneapolis, after a short trial.

J. W. CUDWORTH, of Oxford, New York, who has been out of business for two years, is about to open a jewelry establishment in that place.

THE *Sentinel*, Eastport, Maine says that Jeweler's Hall has been moved to Boynton St., next above Whalen's, in order to clear the lot for building operations.

THE firm of Howe, Johnston & Co., of Nickerson Kansas, was dissolved on the 3rd of last month. The business will be continued under the name of Howe Bros.

THE *Decatur Journal*, Leon, Iowa, says: "D. R. Porter is papering, painting and otherwise beautifying his jewelry store. Dan is bound to be up with the times."

It is simply time wasted to send in for February and March numbers of this year. If there were any left, it would be a pleasure to send them out, but not a copy was left over.

WILLIAM A. SAVAGE, formerly of Greley, Kansas, has removed to LeRoy, where he bought out the jewelry establishment of C. L. Reynolds and continues the business.

SPEAKING of the Manhattan watch, an old watchmaker said: "I have sold hundreds of them but never had one on my hook for repairs." Certainly this speaks well for their staying qualities.

THE 1887 Illustrated Catalogue of jeweler's machinery, tools and supplies issued by W. W. Oliver, of Buffalo, New York, is a model of typographical elegance, a credit to the firm, and a convenience to the trade.

THOSE who received duplicate copies of the February and March numbers of the KEYSTONE this year, will confer a personal favor if they will forward them to this office. Requests for the March number are coming in every day, and it is impossible to honor them.

THE Palatka (Fla.) *Herald* calls John F. Speck & Son, their leading jewelers and further says: The store is one of the most attractive in our city, and the goods are arranged with rare taste and skill. Handsome oil paintings adorn the walls, while small pieces of statuary grace the counters, adding a beautiful appearance to the surroundings that is most pleasing to the eye.

A FEW weeks ago there appeared in our esteemed contemporary, the *Jeweler's Weekly*, a picture of Joseph Fahys, President of the American Watch Case Manufacturers' Association, also an account of his very successful career. Mr. Fahys came to this country a poor boy, and is a very good example of what can be done by a young man who has energy coupled with ability, besides that uprightness of character, which is so much appreciated by the American public. Mr. Fahys stands at the head of one of the oldest and largest watch case manufacturing concerns in the world, and his success is not only a credit to himself, but shows what wonderful progress the United States has made in its manufacturing industries. Such men as Mr. Fahys, are an honor and credit to any industry, and the very good likeness of him shows the strong traits of character in the man.

To sufferers who in vain have struggled to keep their neckties from climbing over their heads "The Grip" button scarf-holder becomes a great relief. To the frantic dude it brings reason; to the rest of us, peace and heavenly rest. Sold by Delany, 2 Astor House, New York.

THE *Jewelry News*, edited by Abner D. Ford, made its appearance last month. It is handsome, ably edited and will be well patronized, judging by the start-off. It will give the Jeweler's Weekly a lively haze and make things generally interesting in New York jewelry circles. May the new enterprise be crowned with success!

THE *Herald*, Hartford Kentucky, speaking of jeweler Martin, recently said: "More than a year ago Mr. C. R. Martin came to Hartford and opened a jeweler's repair shop near the Commercial Hotel, on a small and unpretentious scale. Since that time by a close application to business, he has not only proved a success but has greatly enlarged the scope of his work."

THE Harrisburg Pa., *Telegraph* recently published notices of the leading business men of Steelton. Concerning A. S. Feller, the jeweler, it said: "He is one of the successful business men of Steelton, and in 1880 he came here with nothing but his tools and opened up a repair shop. By close attention to business he soon outgrew this room and built adjoining. This, also, becoming too small, he purchased the location, which he now occupies."

"JEWELER," of Central New York, writes: "I have been in the jewelry business for fifteen years, and bought my goods of about every body. About five years ago I commenced to buy most of my goods from King & Eisele, Buffalo, N. Y., and must say that, whatever the firm agree to do they do it, and sometimes a little more. I advise all who wish to trade with a white house to get their address in their advertisement in another part of this paper and write them."

ONE house on Maiden Lane never speaks of dull times, Messrs. Lissauer & Sondheim of No. 12, whose busy season is from one January to another and the chief cause of it is the push and vim of the firm. Mr. Lissauer is a host in himself, keeping things on the move and with such salesmen as Messrs. Krailsheimer, Veit, Lowman, Bracher, Green, and others, it is not to be wondered that they are always busy. These gentlemen thoroughly understand their trade and always have the right articles. Of course this firm deals largely in the best and a full line of the goods of the Keystone factories are always found in the stocks of their travelers. Mr. Lissauer intends to push trade this fall for all it is worth and to that end has ordered from the manufacturers, a large and elegant line of goods that will well repay any jeweler to look over.

MESSRS. STERN & STERN, of 12 Maiden Lane, N. Y., report a large spring trade. This no doubt is largely due to the personal efforts of the proprietors, who leave no stone unturned to push trade. Mr. Simon Steen manages the business affairs of the firm in N. Y., while Mr. Jacob Stern, M. O. Ettinger, Sam Cramer and others, attend to the affairs on the road. That this is well done is easily seen by a visit to their busy establishment. The travelers are all selected for their especial fitness for their respective positions, which they fill to the satisfaction of all concerned. This house keeps a large stock of first-class goods in the market and in their own words, "offer to the trade all the advantages that capital, skill and experience can furnish," and those who are acquainted with Messrs. Stern & Stern, know that this means a great deal.

THE Julius King Optical Company have found their business increasing so rapidly that more extensive accommodations were imperatively demanded. They have accordingly arranged to occupy nearly one-half of the store where they now are, with J. T. Scott & Co., in place of the small quarters they have had heretofore. Their enlarged quarters will give them largely increased facilities for the transaction of their growing business; also the largest line of *test cases* in the world."

AN invention which must certainly be of interest to the trade is a new racket of putting dealers names and address on the on the dials of watches. The added lettering is quite as well executed as any part of the dial, and equally permanent: Another desirable feature is that after the first dozen the expense is comparatively trivial. The address of the party doing this work is J. T. Williams, 111 South Eleventh street Philadelphia, Pa., of whom a descriptive catalogue and price list can be obtained on application.

E. HEWITT GRIFFIN, of Blue Mound, Kansas, speaking of the late cyclone at that place says that it made the distance from Blue Mound to Prescott 20 miles in 28 minutes by the watch and took everything in the path. He says: "I never want to see another one. I am unable yet to get to work on account of too many nerves. I was at home and just out of the path of the cyclone, yet it lifted my house and took a few shingles. I have received a number of answers to my "ad" in the KEYSTONE. It is the best journal in the trade for advertisers."

THE *Pioneer*, New Rochelle, Connecticut, said in its issue of April 30th: "During the week there has been placed in the post-office one of Akins' Automatic advertising clocks. The clock is a reliable eight-day time piece, with a mechanical advertising device, which presents to spectators every half minute business cards ten inches wide by twelve inches long. Each card remain in sight 30 seconds. A soft bell gives warning of a change and draws attention. It is to be in charge of our enterprising young jeweler, John H. Dugan, and we are satisfied that proper attention will be given to it."

J. T. SCOTT & Co., report a large spring trade, far ahead of that of last year, and that was a good year with them. The Scott boys, as they are familiarly called on the Lane, have added greatly to the stock and name of the old firm in the last few years and are going ahead with a rush that bids fair to make it warm for all competitors. Mr. Townley, who keeps an eye over matters on the inside, is no very small factor in the success that is attending the efforts of this energetic firm. Their stock is the best and the most complete in the market. And no jeweler will wait for the next traveler to come along when he has once looked over the stock of J. T. Scott & Co.

THE firm of Wheeler, Parson & Hayes, is an old landmark on the Lane, and has reached a prominence in the trade that can only be achieved by years of toil and industry, and an attention to the demands of trade. This was always the aim of this house, the largest of its kind in America, and the fact that they take up a line of goods is a guarantee that the article is genuine, and worth the consideration of the trade. Their stock on the road, and at home, is something enormous and there is not a first-class article in the trade but that a retail jeweler may buy of this firm. The social standing of this firm is like its business standing. No move is made on the Lane for an organization of any kind, but all hands turn to Mr. Henry Hayes to take the part of leader.



## SITUATIONS WANTED.

So many apply for space under this head that to give an equal showing, all advertisements must be cut down to the bare details.

C. V. Conyers, Oneida, Ill., 20 years of age; good ref. wishes to finish trade with good workman.

Paul Knopf, New London, Conn., German, married; 17 years experience.

Herman R. Koehler, 40 Market Street, Newark, N. J.

V. T. Barboka, 8 year experience, watchmaker, jeweler and salesman, furnish tools; Iowa City, Iowa.

Geo. C. Reynolds, 1519 South Broad Street, as salesman, traveling or otherwise.

C. C., box 89, Watertown, Wisconsin, 18 years old, 2 years experience, to finish trade.

S. B. Curtis, Chilton, Wisconsin, 21 years old can do ordinary work.

X. box 201, Oneida, Illinois, 20 years old, 2 years experience, can do ordinary work.

"Owen," care this paper. Has talent for designing, and desires an apprenticeship.

H. B. O'Donnell, New Bethlehem, Pa., 17 years old, can do common work.

"D," this office. Age, 34. 13 years exp. Reference. To act as Advertising agent for Mfg establishment.

H. A. Williams, DeRuyter, N. Y. To travel during summer months in the West. Expense only, no salary.

"Traveler," this office. Travel for jobbing house. 8 years experience in the West. Ref. or bond.

"Commercial," this office. To represent some good firm on the road. Age 27. Security given.

R. Theo. Smith, 113 High St., Portsmouth, Va. Age 31 years. Best references. Experienced watchmaker and jeweler. Good situation and wages.

"G. P. H.," Portsmouth, N. H., Box 716. Age 22. Reference. Do clock and jewelry work. To finish trade as watchmaker.

"P.," this office. Age 25. Good ref. Practical jobber. Salesman, quick and obliging. Phila. preferred.

Scott McMurtrie, 6 N. Centre St., Pottsville, Pa. A situation as manufacturing jeweler, watchmaker, or repairer. Good references.

"Jewel," this office. 24 years experience. Can do ordinary work. Wish to finish trade. Reference.

C. E. Smith, 32 E. 3rd St., Williamsport, Pa. Good habits. 6 years experience. Reference.

H. B. O'Donnell, New Bethlehem, Pa. Age 17. Experience 1 year. Reference.

J. H. Lee, box 293, Monroe city, Mo., 26 years old, 3 years experience, good clock and watch repairer.

A. T. R. box 77, Clarksville, Tennessee, 18 years old, 2 years experience. To finish trade under first-class workman, can speak German and English.

C. Eaton Dudley, 595 East 4th street, South Boston, Mass., 23 years old, 7 years experience, can do repairing.

C. H. H., box 295, Belleville, Canada, age 19, 4 years experience; reference.

J. B. B., care of J. H. Mosher & Co., Prophetstown, Ill., 12 years experience, 1st class references.

"Philadelphia," care this office, 10 years experience, 1st class references.

C. Dubreuil, 48½ East Congress street, Chicago, Ill. practical watchmaker, 9 years experience.

"A," box 43, Rensselaer Falls, N. Y. 24 years old, 4 years experience, all tools but lathe.

J. A. Knox, Plano, Ill. First-class watchmaker, jeweler jobber, engraver and salesman, set of tools and best references.

"B," lock box 1, Ovid, Michigan, 6 years experience, watch and clock repairer and salesman.

"S," this office. Traveling salesman. Has experience. Is quiet and intelligent.

Box 43, Trumansburg, N. Y. In N. Y. state by first class watchmaker and engraver of 12 years practical experience. Complete set of tools. Go to work at once.

S. B. Curtis, Chilton, Wisconsin. Age 21. Wishes instruction. Can do all ordinary work.

"J. D. L.," 61 Halsey St., Newark, N. J. 3 years experience as engraver. Set of tools. Best references.

Box 12, Urbana, Ill. Age 25. 7 years experience Do all kinds of work. \$15 per week.

"P. E. H.," lock box, Carbondale, Ill., 5 years experience, tools, including lathe, 1st class references.

"K. L. P.," this office. Can repair jewelry and engrave. Set of tools. 1st class references.

J. C. Leibel, 497 Nicollet Avenue, Minneapolis. 16 years experience at bench. 1st class reference.

"G. S.," box 13, Stevens Point Wisconsin. 7 years experience. 4 years in Norway and 3 in United States. Do all kinds of repairing.

From April to August, at summer resort. 7 years experience. Repairer, salesman. Can take full charge. References. I. H. Mason, Box 83. Darlington, S. C.

## FOR SALE.

A RARE chance for a good watchmaker with \$1500 cash. A good clean stock and fixtures in a live manufacturing town of 2000 inhabitants. No opposition. Engaged in other business, reason for selling. Box 269, Hinsdale, New Hampshire.

\$500 WILL buy fixtures, tools, clocks, spectacles and good will of a well established jewelry store. Reason, ill health of the owner. G. Roettger, Petersburg, Virginia.

ONE of the finest jewelry stores in this section. About 28 miles from Boston. Stock, tools, fixtures, etc., about \$6000. Lighted by gas. Has faucet for water. Can reserve a part if desired. For particulars, address Wm. H. Howe, Franklin, Mass.

A NEAT jewelry store in a live manufacturing town of 3300 population. 30 miles from Hartford, Conn. 2 railroads. Good run of trade. No opposition, cheap rent. With fixtures, stock can be reduced to \$500. For particulars, address Hartford, this office.

\$10 LESS than regular price. One S. D. Ingh Engraving Machine complete. Has never been used. Henry Dehnell, Sandusky, Ohio.

THE best located jewelry stand in Chicago. Sickness, cause for selling. G. Hook, 151 State St., Chicago.

A FIRST-CLASS jewelry store. Nice clean stock of diamonds, watches, clocks, jewelry, optical goods, and plated ware. Fixtures consist of 5 plate glass show-cases, one fire proof safe, fine bench with tools and material. Bench work for last year over \$2000. No opposition within 80 miles. Cash price \$3500. Five room brick dwelling, 2 blocks from dwelling. Store and dwelling, cash price, \$6000. Stock can be reduced. Old age and failing eyesight, reason for selling. Only those with cash need apply. R. C. Richmond, Miles City, Mon.

## FOR SALE.

FOR SALE—AT 20 PER CENT. DISCOUNT, watchmaker's and jeweler's materials, optical goods, silk-guards, Swiss tools, etc. Prices can be taken from any dealer's catalogue. Satisfaction guaranteed. CHAS. D. HAWKINS, 671 Eight Avenue, New York City.

THE oldest jewelry store in a thriving city in central Illinois. Excellent location, little opposition. 5,000 population. Good fixtures, almost new. Well selected stock which can be reduced to suit purchaser. Have five railroads, large manufacturing interests, good business with neighboring smaller towns. Natural gas, electric light, and waterworks in good running order. Other new enterprises projected. A splendid opening for a man of limited means. Add. "Enterprise," this office.

ONE Optometer with reflecting mirror, and full set of lenses from 5 to 60. Good as new. Cost \$12. Price \$8. One Depleidoscope or transit instrument for taking the true time. Cost \$45. Price \$30. No use now as I get time by telegraph. M. D. Kelly, Hopkinsville, Ky.

ONE of the finest and best paying jewelry stores in the state. Profits from \$4,000 to \$5,300 per year, for the past six years. Bench work will overrun \$175 per mo. Will lease store with all fixtures. A rare opportunity. You need only to buy clean stock to the amount of \$5,000. Ample reason for selling. If you wish to buy out a well established trade, it will pay you to investigate. Address "Penna.," this office.

THE most desirable jewelry store in western New York. Fine fixtures and clean stock amounting to \$6,000. Will reduce to suit purchaser. Wish to retire from business. Box, 275, Albion, N. Y.

ONE Whitcomb Lathe, 1½ hard, Universal head, jeweling rest, wheel cutting fixtures complete. Pivot polisher, Hall's staking tool, all good as new. Address "R.," 2953 Groveland Ave., Chicago, Ill.

ESTABLISHED Jewelry Store on Main St., Germantown, Add. F. A. Colladay, 3786 Germantown Ave., Philadelphia.

TWO regulators, or exchange for second hand engraving machine. Box 560, Kewanee, Ill.

JEWELRY establishment in thriving town of 4,000 population, in the Lykens valley coal regions. Good location. Nice stock. In all worth \$600. Owner has two stores, must sell one. John Sweger, Lykens, Pa.

\$30 BUYS an 8 ft. regulator, new. Good timer. "T. O. B.," Box 44, Traverse City, Mich.

BRANCH jewelry store located near centre of state of Missouri in town of 1500. Has 3 railroads. Stock about \$1,000 including nice fixtures. Will sell at a sacrifice, if sold at once. For particulars, address J. L. Field, Pittsfield, Ill.

10 BEAUTIFUL high counter show cases, with stands. Will exchange for rings and chains. J. L. Field, Pittsfield, Illinois.

A GOOD paying jewelry business in a live town of 2000 inhabitants. Established 11 years. No opposition. Low rent. Has 3 railroads. Stock, fixtures, etc., will invoice about \$250, but can be reduced to suit. Address "Jeweler," Mineola, Texas.

IN the centre of San Francisco, Cal., a nice small watchmaker and jewelry store, established 10 years. Stock and fixtures about \$2500. Steady selling and repairing trade. Reasonable rent. Reason for selling, wish to retire from business. Those meaning business apply at this office.

JEWELER'S safe, fire proof, Sanborn patent. Outside 63¼ x 39½ in., and 32¼ in. deep. Inside, 40¾ x 24¾ in., and 18 in. deep. In perfect order, very cheap. Box 10, Hagersown, Md.

52 INCH Royal Mail bicycle, enamel finish, ball bearings, Lakin cyclometer, used two weeks, very cheap. Box 10, Hagersown, Md.

WRIGHT Engraving Machine, some tools and a tricycle. Or will trade for new stem wind watches. Box 94, Nashville, Tenn.

160 ACRES of fine farm land in Clark Co., Kan., to trade for a stock of gold watches and movements. Price, \$1200. For information, address Myers Bros., Ashland, Kan.

OR exchange. Jewelry stock and fixtures for farm or city property. Invoice about \$1800. Box 1, Chamberlain, Dakota.

AMERICAN Lathe, (bed) No. 1 chuck head, 7 chucks. No 2 chuck head, 3 chucks. T rest, Tail stock, Universal head, Foot-wheel, Belting. All in good order and true. Cash \$35. Box 133, Benton Harbor, Mich.

CHRONOMETERS at a bargain. First-class new and second hand ones. Also on hire. D. Eggert's Sons, 74 Wall St., New York.

A T a bargain. A jewelry, book and stationery store in one of the best towns in central Dakota. Sales \$10,000. Low rent. Good reasons for selling. Half cash, balance on time. Stock invoices about \$3000. Add. Hugh McGuire, Graton, Dakota.

JEWELRY, book and fancy goods store in a good town of 1200 inhabitants. No opposition. Town growing rapidly. 10 miles to nearest opposition. Add. "A. I. T.," Box 116, Roann, Ind.

ONE elegant bran new black walnut silver ware case, with three French plate glass doors sliding up with weights. 10 feet long by 9½ high. Cost \$155, price, \$100. Address N. C. Ansted, Fairfield, Ia.

A GOOD jewelry business in a growing New England city of 15,000. Old stand, stock and fixtures \$6000, but can reduce stock. "E. A.," this office.

OR trade for Am. watches. One 16 inch, 8 tune music box, \$20. One 20 inch, 6 tune music box \$25. Both new. Otto E. Heineman, Allegheny, Pa.

HOPKINS Lathe No. 3, nearly new. 50 lb. Webster wheel attachments. Assortment tools. Box 142, Stoughton, Mass.

A RARE chance is offered to buy a well established jewelry and stationery business in eastern Nebraska. Population 1500. 2 railroads. Stock and fixtures \$5000. Can be reduced. Half cash will secure it. Add. G. W. Marquardt & Sons, Des Moines, Iowa.

BEST jewelry store in healthiest town in Pennsylvania. Within 1 mile of two railroads. Address "A. B. C.," this office.

A GOOD paying jewelry business, in one of the finest cities in Neb., with 12,000 population. Large R. R. centre. Stock will invoice from \$10,000 to \$12,000. Can reduce stock and give time on part. Work enough for 3 men. Competition light. City growing fast. The right man can make a fortune in a few years. Reason for selling will be given on application. It is the best paying and finest store in the state. Any jeweler wanting to make money, it will pay them to investigate. Address "Jeweler," Box 142, Hastings, Neb.

## FOR SALE.

JEWELRY store, stock and fixtures to close the estate of E. R. Sollday, Lambertville, N. J. The best location in town. Population 4500. Only one other jeweler in town. P. R. R. shops permanently located. Pottery about being built, which will employ 200 hands. For particulars, address C. Sollday, New Hope, Pa.

SECOND-HAND Swiss universal lathe (wheel gear), good repair. Price, \$25. F. N. Day, Oxford, N. C.

OR exchange for anything pertaining to a watchmaker or jeweler. A gold, silver and nickel plating battery, different solutions, and a book of instruction included. Box 45, Lebanon, Pa.

NICE Jewelry business in Mayville, head of Chautauqua Lake. The most beautiful part of the country. For particulars, address E. A. Kibbe, Mayville, N. Y.

\$25 WILL buy Hopkins Hard lathe, 19 chucks, tail-stock and screw plate. \$15 for Swiss Universal 4½ in. head, in good order. G. G. Case, Jackson, Mich.

JEWELRY store. County seat. 2500 population. 3 railroads. Division station. Fixtures new. One 8 ft. show case. One wall case. Fine 10 ft. regulator. Burglar proof safe, 3000 lbs. No opposition. Repairing, \$80 per month. Best store in county. 25 miles to any larger town. Stock, \$2000, clean and new. Sales \$500 per year. Send information to any address. Sell on account of ill-health of wife, who must go to Pacific Coast. J. W. Vaughn, Yates Centre, Kan.

## SPECIAL NOTICES.

ALL watchmakers should send 75 cents for our Patent Ruby Pin Adjuster. Best and only practical tool for the purpose. Robertson and Roberts, Boulder, Col.

CHAS. W. HOPKINS, gold, silver, letter and ornamental engraver. First-class work. Lowest prices. Special terms for steady patronage. 339 Washington St., (Room 12) Boston Mass.

KELLY'S invisible, secret, magnetic, safety lock. For counter show cases. Just the very thing you've been wanting. Keep your cases locked day and night, and be secure when your back is turned to servants and sharp customers, or when moving, at a fire, etc. It's no more trouble to you than an ordinary spring latch, and costs but a trifle. Perfectly simple, no springs, screws, rivets, noise or anything to make it troublesome or easy to get out of order. One is used to each door. Can fit 1 doz. to your cases in 30 minutes. Price, by mail, \$2.00 per doz. No less sold on first order, 15 cents each for extra lock bars. Full directions with each dozen. Send all orders to M. D. Kelly, Hopkinsville, Ky.

SEND ALL WATCH REPAIRING WHICH YOU can not find time to do yourself to CHAS. E. BILLINGS, 71 Nassau St., N. Y.

CHAS. S. CROSSMAN, watch and chronometer maker for the trade has one of the largest and best equipped watch repair shops in the U. S., and is making a specialty of fine and complicated work for the trade. Correspondence solicited. Estimates furnished. 61 Nassau St. N. Y.

CHAS. REISS, Albany, N. Y. Fully and special equipped repair department for trade work only. Fine and complicated watches adjusted and demagnetized by special workman in my employ. We also accept of any ordinary repairs and give estimates on all classes of watch work. Jewelers at a distance will receive our immediate attention. Correspondence solicited. Established 1869.

"WATCH and chronometer jewelry" by N. B. Sherwood, illustrated, 96 pp. Paper, 35 cents. Cloth, 50 cents. "A Practical Treatise on Repairing Watch Cases," by W. Schwanatus. Paper 15 cts. "Jewelers' Practical Receipt Book" contains over 100 receipts and formulas. Paper 15 cts. Above mailed to any address on receipt of price. Geo. K. Hazlitt & Co., 174 Clark St., Chicago, Ill.

TRADE 160 acre farm for \$3000 stock of watches, etc. "Jeweler," Box 26, Fargo Springs, Kan.

PATENTED! Capitalists, take notice. Economy is wealth. Invest in Canada, England, or our own home. Will exchange territory for good property or stocks. Send stamp for explanations. Box 193 Louisville, Kansas.

A GOLDEN opportunity for you to step into a big paying jewelry business. Engaged in other business. Will sell our jewelry store in town of 3000 population, in Missouri. County seat. Only one other store in the county. Doing a good paying business. Beautiful location. Don't write unless you mean business, and have \$1000 in clean cash. State distinctly, what you can do, and when you can do it. Will reply in like manner. Stock is clean and fresh, and will invoice \$3000. Address "Strictly Business," this office.

FOR exchange. We have a patent on an Iron Fence Post that costs 11 cts. complete. One of the best selling articles out. Will exchange territory in any part of the U. S. for anything in the jewelry line. Write for full particulars. A. M. Foreman & Bro., Greenleaf, Kan.

TIME is money. Every watchmaker well knows the time consumed and dirty work performed in cleaning an old clock, especially the nickel alarm clock, which is so difficult to put together right. I have a receipt of my own invention, with which you can clean the dirtiest and grasiest old clock in five minutes, without taking it to pieces, and will be just as clean as one at which you spend an hour or more, in cleaning the old way. You only have to take the movement from the case and immerse it in my preparation, following a few simple directions to produce the desired result. It is not necessary even to take out the balance wheel; can have the clock running in five minutes. The ingredients for receipt can be purchased at any drug store for 15 cts., which can be used for months without much waste. Price of receipt 50 cts. Address T. B. Stephenson, Canandaigua, N. Y.

DON'T be a clam and keep on using any powder or any preparation that you have to rub and wear out your plated ware with, but send 50 cents to N. B. Blood, Laingsburg, Mich., and get a receipt for a fluid to dip your plated ware (gold or silver) in, that will instantly clean it and leave it with all the lustre and sparkle of new ware. It contains no acid.

EVERY watchmaker, jeweler and optician wants a Hammond wheel for reducing and finishing watch crystals beveling locket-glasses, and spectacle lenses. One size a minute. Edges perfectly finished, and quickest cutting tool made. Adds 50 percent to appearance of spectacle lenses. Mailed with directions. \$1. Agents wanted. W. F. Hammond, Greenport, Suffolk Co., N. Y.

CHAS. S. CROSSMAN, watch and chronometer maker for the trade. High class work at moderate prices. Complicated watches a specialty. Also jobber in Elgin and Waltham material specially selected to fit. 61 Nassau St. N. Y.

CHAS. REISS, 31 and 33 South Pearl St., Albany, N. Y. Headquarters for jewelers. Jobber in American Movements and Cases. Swiss and American material of every description. Correspondence solicited. Orders filled with accuracy and promptness.

## SPECIAL NOTICES.

TRADE for Kansas farms I have three farms in Arkansas valley, to trade for stocks of jewelry, silverware, fancy goods; also tools and fixtures wanted. Address J. J. Colby, Kingman, Kas.

SEND overwork to A. Moeller, watch and chronometer repairer. Box 396, Cumberland, Md.

Rare chance for good watchmaker in one of the finest country seats, in south-western Kansas, the most prosperous state in the Union. 2000 inhabitants, two railroads, two more close at hand. Invoice \$1,500. If you have the cash and want to improve your condition, address, "Lucky," this Office.

15 000 DOLLARS will buy the best established watch and jewelry business (in Birmingham, Ala. Cash only and nothing else. Address, Box, 351, Birmingham, Ala.

## WANTED.

WANTED a young man who can repair jewelry, and can assist at watch repairing. S. C. Levy, 1817 Ridge Avenue, Philadelphia.

WANTED—Every watchmaker in the U. S. to know where he can send a job of difficult or complicated watch repairing. Also jobber in Elgin and Waltham material. Chas. S. Crossman, 61 Nassau St. N. Y.

WANTED TO TRADE—A HOTEL FOR \$4500 WORTH of watches, clocks, and jewelry. Hotel is good renting property, and fast doubling up in value. J. W. SCHRIMPF, Spirit Lake, Iowa.

JOBBER and manufacturers of jewelry to keep me posted in bargains in their line. Spot cash paid for any approved bargain. J. W. SCHRIMPF, watch-maker and jeweler, Spirit Lake, Iowa.

SITUATION by a competent watchmaker of 14 years experience. Can repair jewelry and do some engraving. Would prefer working only on watches. Permanent situation must be offered. Entire satisfaction given by correspondence. Add. "A. L. B.," this office.

SITUATION in a retail jewelry store by the 1st of Aug. Salesman and workman. Have had both job shop and factory experience, also do engraving. Have a full set of bench tools. Best ref. given. Correspondence solicited. Add. "Mainspring," this office.

SITUATION by young man of 23, with competent watchmaker to finish trade. Instruction more an object than wages. Have had 2 years experience at the bench. Best of reference as to character, etc. Address Box 493 Red Wing, Minn.

TO buy small stock of jewelry in some live town of from 5000 to 10000 inhabitants. State full particulars. Add. Box 363, St. Marys, O.

A WATCHMAKER that can do all kinds of work in a jewelry shop. State what kind of lathe you use, what expected, and ref., if any. D. L. Brown, Detroit City, Minn.

ONE large Sea-Bean. D. L. Brown, Detroit, Minn.

BY young man 22 years of age, with five years experience at watch, clock and jewelry repairing. Can give the best of ref. from present employer. A. F. Rix, 87 Cliff St., Norwich, Conn.

SITUATION by young man of 27, as repairer of watches, clocks, jewelry, etc., or at general jobbing. Have had nearly five years experience at bench in jewelry factory, and 2½ years at watch, clock, and jewelry repairing. Reference furnished. Alva L. Leslie, Franklin, Mass.

BY a young man of 22, with good watchmaker to finish trade. 2 years experience. Can do all ordinary clock and jewelry repairing, hard solder jobs, and some light watch work. Good references. Will go anywhere in New England. "G. P. H.," Box 716 Portsmouth, New Hampshire.

POSITION as jewelry manufacturer and repairer. Can also make raised and colored monogram work. Also make up all kinds of alloys in coloring and gold and silver refining. Will take entire charge of shop. "J. C. L." 611½ Nicollet Ave. Minneapolis, Minn.

TO exchange one 48 in. Ideal Bicycle for anything in the watch, clock or jewelry line. R. F. Mason, Darlington, S. C.

A YOUNG man who is a good watchmaker, engraver, jobber and sal man. To the right man will pay good wages, but must come well recommended. Address N. Strouse, Louisiana, Mo.

SITUATION by young man 19 years old. California preferred. 3 years experience. Can do all ordinary watch, clock and jewelry repairing and plain eng. Have own tools, including Mosley lathe. Terms moderate. Address V. Hunziker, Cloverdale, Cal.

A GOOD German watchmaker with references as partner in a good Texas City, with the chance to buy the business, if wanted. Only a good German watchmaker with good references need apply. Good chance for the right man. Address "O. K.," this office.

PARTNER with \$4000. Management of jewelry business. Western city of 45,000. Well established. J. C. Edwards, Peoria, Ill.

SITUATION in retail or wholesale jewelry store as salesman or workman. Have had both job shop and factory experience. Also do engraving. Have full set of bench tools. Best reference given. Address "F.," this office.

A PARTNER in the jewelry, book and stationery business in a growing town in Southeast Kansas. None but a good workman need apply. Here is a good opening for a good man. Address J. W. Cries, Thayer, Kan.

AMERICAN dollar of 1795 and 1799. Box 44, Guilford, Maine.

15 CENTS for bottle of soft soldering fluid that will not rust. Warranted. J. W. Flowers, Toledo, O.

BY a workman of long experience, a situation as watchmaker. Best of references. Have my own tools. Address "A. R.," this office.

30 INCH carved iron and 60 inch oval eye iron spectacle sign. S. J. Strickler, Salina, Kan.

A YOUNG man of good habits and a good workman for repairing. Send references and state wages expected. Syd. E. Brown, Merrillan, Wis.

SITUATION as a watchmaker by a man 34 years of age. Is sober and steady and capable of doing watch, clock and jewelry repairing and engraving. Can speak English. Please say what board and lodging cost, and I can say what I can work for per week. Box 363, Holden, Missouri.



## TRADE TOPICS.

BREEZY BITS OF GOSSIP FROM ALL  
OUR CORRESPONDENTS.

Brief extracts from the mass of letters received at the "Keystone" office in the past thirty days.

Trade Topics, as predicted, grow more interesting with each number. Our New York correspondent is a picturesque chap, and deals out an extra lot of chromos with his chat. He opens as follows:

In my last letter I gave you a chromo. I shall commence this one with another.

It might be well to call the attention of editors, correspondents and spring poets that this idea is copyrighted by a person whose initials are J. L. S., and that these letters stand for John L. Sullivan. A hint to the wise should be sufficient.



"Are these men playing leap-frog?"  
"No. They are not playing leap-frog."  
"What are they doing then?"  
"The man with the specs on is making the bald-headed man walk Spanish."  
"Does the bald-headed man like to walk Spanish?"  
"He does not."  
"Is the bald-headed jeweler mad?"  
"Yes. He is very mad."  
"Why is he mad?"  
"He is mad because the bald-headed traveling man said his snide filled case was as good as the Boss."  
"Why did the bald-headed man say that?"  
"Because its the only way they can sell other filled cases, by claiming that they are as good as the James Boss."  
"Are there any filled cases as good as the Boss?"  
"NAW!!!"

I have no doubt that many jewelers who have sold watches all their lives have never given a thought to the many different displays of taste that govern watch buyers, and I venture the prediction that in seven out of every ten watches sold, the style of case has more to do with the watch than the movement.

This shows how important it is to a jeweler to deal in first-class cases only. This is self-evident, as very few persons understand the merits or parts of a movement, and rely on the jewelers word that it is a good timepiece. In buying a watch, the taste and eye of the buyer must be pleased, and when I attempt to show some of the reasons why cases are bought or left, it will be seen what trials a jeweler has to undergo.

First—To please watch buyers, cases must be made as follows: Of iron, nickel, celluloid, brass, silver and gold. In silver, they are made to weigh from one to sixteen ounces; in gold, from thirty to one hundred dwts. Filled cases are in both gold and silver; the gold is ornamented in raised work, and so natural is the preference for a yellow watch over a white one, that our Swiss competitors have filled the country with watches that are only gold in color. Cases must be made flat, round, square and other odd shapes in hunting, open face and skylight; in sizes of less than one to six inches in diameter; in styles called full box, half box, bourbon, bastard bascine, half bascine and Jurguson. Movements have been put in rings, snuff boxes, skulls and breastpins, in fact, in everything that human ingenuity and skill could suggest.

They are made in gold from 4 K. to the pure gold dug by a man in California in 1849, who insisted on having a case made out of that gold, and passed the rest of his

life in the firm belief that he had the original gold in his pocket. (This is a good place for the jeweler to wink at himself.)

It might be added here that these cases cost from \$50 to \$10,000 according to the taste and fancy of the buyer and the state of his credit.

After all the conditions are complied with, these are some objections called forth: The cases are too thin or too thick, too small or too large, too round or too flat. The springs are too hard or too soft; the bow is too large or too small; the pendant is too long or too short; the crown is too large or too small; the cases are too large or too small. They are too heavy or too light; they are too white or too blue; they open too hard or too easy; the joints are too large or too small; the case springs open too far or not far enough.

The bezel or cap does not open properly; the joints do not fit well; the case does not close tight enough; and—the price is too high.

If you have read this far, you deserve a chromo, and here it is:



"Is this a circus or a political meeting?"  
"No. It is neither. It's the store of a wide awake jeweler, who keeps only Keystone goods and knows how to advertise them. See how the small boys demand their goods. See, also, the small boys with the dog. They are going to have some fun, but it will not be fun for the dog. Indeed, there is nothing funny about a snide filled case, except the fact that jewelers should sell them. This is funny now, but it won't be after awhile. In truth, it will be serious when a hot customer comes in and wants to know why such an affair was sold to him, or, at least, why he was not told exactly what it was. He can tie it to a dogs tail, but that is cruelty to animals."

In taking up the subject of engraving, one is almost lost in amazement at the various tastes displayed and the money people will pay to satisfy their tastes.

One man will refuse while another will select top and bottom borders, landscapes, shells, or all-overs, and these styles alone embrace hundreds of different designs. Many want their trade or occupation engraved on the case; others their photo, or their wife's, or their best dog, but I can't call to mind any man ever asking that his mother-in-law's picture should be engraved on his case. Some want monograms or society emblems in elaborate designs, pictures of stores and mills, while others are firmly convinced that these people are walking monuments to the leniency of the fool-killer.

Others want locomotives, cars, steamboats, sulkies, sawmills, cotton mills, lumber and mining scenes, horses, cows, (I remember one fellow who wanted a landscape with a fat pig roaming around. He got it.) lions, tigers, buffaloes, bulls, giraffes, dogs, cats and elephants in all kinds of impossible positions. Yet I have seen designs where the engraver had succeeded in making something that a person might worship without breaking the second commandment, as it was like nothing in heaven above, or in the earth beneath, or that is in the water under the earth.

As far as my knowledge of birds extends, not a single member of the feathery tribe has escaped the engraver's tool. In speaking of birds, it brings to my mind

the strange fact that even superstition has largely to do with people's tastes, and that too, in a quarter where one would least expect it—in Boston—and New England. This illustrates how closely even intelligence and superstition are blended together. No jeweler can sell a case with a bird engraved on it, as the people of that section hold that it *will fly away with luck*. It is said that a jeweler in Boston by the name of "Bird" could sell no cases until he changed his name to "Beans."

While Boston insists on no birds, they want engine turned and E. T. E. only. This is also largely true of the South, while the Middle States and the West want plain goods and heavy weights. Again, the East and South want only light cases, with now and then an exception, as I once saw a 16 oz. case ordered for a man in Maine.



"Is this a morgue?"  
"No. It's not a morgue."  
"Is it a dead jewelry store?"  
"Right you are."  
"Will they ever wake up?"  
"Yes. When the sheriff comes and sells them out."  
"What will they do then?"  
"They will get mad and swear, and will see the Boss sticker that that real good little boy has stuck on their window, advising them to buy Boss cases."  
"Will they do it?"  
"Indeed they will."

As a little or big encouragement to the trade, I would say that, according to Bradstreet, there are 40,000 more persons employed now, than there were in 1885, and that their wages have been brought up to the level of 1881-2. This means watches. There landed at Castle Garden, one day this month, 5000 emigrants, and there were not twenty watches in the crowd. They will want Keystone goods as soon as they get settled and get their eyes open. J. L. S.

## OBJECTIONS FILED.

The following letter from Elliot C. Reid, of Baltimore, is so full of life and snap, that it is given in full.

"I have been reading the KEYSTONE with much interest for some months, and began to think one, at least, of our trade journals was solid, but some of your answers to correspondents in your February number will not stand the test of experience.

Now, let me tell you, benzine will not clean a watch or anything else. It leaves it smeary, in fact, it only dilutes the oil; and the soft solder artists, who use benzine, never think of taking the end stones out of the sinks to balance. The benzine carries the oil by capillary attraction between the hole and cap jewel, and leaves it a gummy accretion to thicken speedily any fresh oil you, or I, or anybody else may apply.

Sulphuric ether is better, but it dissolves the shellac which holds the jewel pin and pallet stones, and moreover it stinks like a hospital. Ladies stick up their dainty noses at any jewelry store where they use ether, and moreover, it does not do the work satisfactory to a discriminating workman. Alcohol, ammonia, and fine chalk or whiting is a compound a thousand times more desirable, but soap and

hot water is the fluid to clean watches, gold jewelry or almost anything that is greasy and dirty. After washing, dry on a soft cloth and throw into alcohol to displace any water lurking around screw heads, such as are in polished jewel settings and those that hold the potence. From the alcohol put into hot boxwood sawdust. After the plates and wheels are dry, dust off with a soft fine brush and you have a clean watch.

Mr. W. C. Olinger, of Lampoe, Cal., asks if it is necessary to follow treadle lathe work with a bow lathe? Now, I should first like to know what he means by a treadle lathe. If he means one of those Swiss combination affairs, which has two spindles (one carrying a universal head), I should say yes to a good filing block. But if he means one of our better class American lathes, I would like to know what he would want with a bow lathe except to get the pivots out of round.

Let me propose a conundrum to the advocates of pivots finished on the Jacot lathe principle (and the Jacot lathe is only the perfection of a bow lathe). What would they think of a machinist who contended he could file a bearing or arbor truer in a three cornered notch, than he could turn it?

I beg pardon for trespassing so long on your time, but it seemed to me as if my criticisms were not only admissible but called for.

S. E. UPDEGRAFF, of Newton, Illinois, writes: "I have a job I would like for 'Our Watchmaker' or some of the trade to help me out. I have for repair an English Lever gold case watch made by Wm. Robinson, Liverpool, that will only run at the farthest twenty-three hours. The chain winds clear up on the fuzee, and runs all the way down. None of the fuzee has been cut off. You will favor me greatly, if you can tell me how to make it run the allotted time."

Your conundrum requires further explanation. If your watch has not been tampered with, it should run about thirty hours. It is easy to tell if the train is all right. It is easy to judge, for instance, if your main wheel has 70 teeth, and the spiral of the fuzee allows 4 coils of chain, then your watch will run thirty hours. That is, there is four turns of the fuzee after the winding arbor has had about one-sixth of a turn. Sometimes the fuzee (great) wheel has sixty teeth, then it requires five full turns of the winding arbor to produce the thirty hours. It not unfrequently happens that some inexperienced workman puts in a new fuzee wheel, and in the change, he substitutes a sixty tooth wheel in place of a seventy. This, of course, only allows the watch to run twenty-three or twenty-four hours at the most. If you count the teeth in the great wheel and the leaves in the centre pinion, you can quickly get at the fault.

FERDINAND SCHMID, of Asbury Park, writes: "Will the KEYSTONE kindly inform me how to make a substance which is used in Switzerland to boil watch movements instead of cleaning. Some watchmakers use it here in America. It does not affect the blue of steel, nor dissolve the shellaced pieces, nor does it effect the polish or brightness of steel. As soon as it boils a few seconds, the pieces are removed from the boiling cup and dropped into alcohol and thus everything is cleaned even the holes. No brush, no pegwood is necessary. All old and hard oily substance is removed. It is superior to benzine or ether sulphate. The first leaves the dirt on, if not brushed off right after taken out, the latter dissolves most everything, etc."

The process to which you refer is one which the Swiss workman usually terms "cooking," and like many others, each workman varies the mixture to suit himself. But the principle is simply the use



of hot water and soap, with just as little water as can be worked. The work or parts of watches to be cleaned are usually put in a wire frame or rack, so as to keep the parts together while the hot solution is acting on the gummy oil. When the solution has done its work, the parts are thrown into alcohol, which dissolves the adhering soap and leaves the work bright and clean. Ammonia or cyanide of potassium is not necessary or even desirable in this process.

C. E. DICKINSON, of Garden City, Kansas, writes: "Please tell me which is the best watch repair record book."

This was referred to "Our Watchmaker" and he said he did not know whose was the best method, but gave his mode of record as follows: "Owners name quality of case; silver or gold, initials S or G; F for filled; N for nickel; B for brass; then case number, also movement number with an initial to denote the make. As for instance, W for Waltham, E for Elgin, H for Howard, I for Springfield, Ill. For instance, John Smith leaves an American watch for repair, the record would read: John Smith, G. H. E., D 46278, 2846294, cleaned and pivot to bal. The plain English of this would be: John Smith, gold hunting watch case, number D 46278; movement number, 2846294, with the entry for repairs. On the inside of the back case, the workman scratches the month and year, if the repairs are, say a mainspring. One star or cross is added as \* J., 4-87. The J is the workman's signature, and the star indicates only a partial warranty.

FRANK P—, of Austin, Iowa, writes: "As your paper is the place to send good things, I think this worthy of space. It will be noticed by a great many watchmakers that when the staff is driven out of a cut balance wheel, the arm will seem to bend and embrace the wheel. Do what you wish to do with the staff, and re-rivet in the wheel again. The wheel will be found to nearly true without further trouble."

This is in many instances true, but the rule has exceptions—as for instance, the balance seat, i. e., the staff when the balance is riveted on, was a trifle small, and the workman who set the balance had to rivet it on by closing down the seat with a hard riveting. In this case, when the staff is driven out, you will probably find your balance disturbed after putting in a new staff. Many workmen, when putting in a new staff, put the staff in split chuck and turn away the balance seat from the lower side. This allows the staff to be pushed up from below without contorting the balance.

MR. BRADSHAW of Paris, Illinois, sends us a five-page communication in regard to the crying (howling is a better term) evil of the indiscriminate distribution of price list circulars to every man who can and will sell goods which legitimately belong to the jewelry trade. Now the KEYSTONE is always the champion of the trade and its interests, and we would willingly devote space for Mr. B's article, and not only his article but the whole sheet, every one of the sixteen pages, if we thought it would do any good, but our journal only reaches the trade—members of the craft—and these are already convinced in regard to this matter. All we can say is for every jeweler to absolutely refuse to buy any articles of firms that resort to such nefarious practices as sending out catalogues and price lists to dealers outside of the legitimate dealers in such goods.

J. A. WILLIAMS, of Birmingham, Alabama, writes: "A few days ago, a watch came in the shop for a case screw. It was a double time, split second, 18 or 20 lign,

full jeweled, patent lever Swiss watch, nicely finished in a gold case. There was a peculiarity about it that I did not understand. In the end of the regulator was a gold screw which touched the inside of the outer coil of the hair-spring, and in vibrating, the hair-spring touched only on the inside, while on the contrary, we are so particular to have the coil touch easily on both sides."

It is probable that the condition you speak of is the "notion" of some cranky watchmaker to produce isochronal adjustment, as it has long been held by adjusters that the inflection and deflection of a hair-spring were unequal in time (duration); and again, it might have an influence on the adjustment to position.



MAY-BE.

COLORED GEMMAN.—"Can yer gib me a seal ring to fit dat finger."

FACETIOUS JEWELER.—"We're all out of large sizes today, but you can get fitted out with a jeweled dog collar, next door."

"INQUIRER," of Stayner, Ontario, asks: "Will you, or some of your readers please give me some information as to the mode of cutting and polishing glass? Edges of spectacles, lenses, or watch glasses, for instance. An answer to the above will much oblige."

The Philadelphia Optical Company replying to the above, says:

"In fitting lenses, we cut the shape of the lens with a diamond, and then clip off the edges with a pair of pliers. The edges are then ground down on rough soft stone and finished smooth on hard Scotch stone to size. When the edges are to be polished, we use a wooden or cork wheel with flour pumice stone moistened. In lenses that are not to have any frame, we might add that it is not desirable to have the edges polished as oculists object on account of reflection."

WM. L. JOBE, of Columbia, Miss., writes: "Did you ever hear of a bracelet being soldered on a lady's arm? I soldered one on a lady a few days ago."

HOW'S THIS FOR HIGH?

"Dear KEYSTONE: Please tell me where you send Mr. —'s papers, for I would like to find out. I am his wife. I have not heard from him since he left A—, and I don't know what to make of it. If you know where he is, please let me know by return post. Please send his papers to me, if he does not get them, and oblige

Mrs. —

WATCH springs are blued by heat. Blue lacquer may be made by coloring shellac varnish, made thin with 95 per cent alcohol, with aniline blues.

M. D. KELLY, of Hopkinsville, Ky., advertised a safety lock in the April number. He now writes: "For last month's ad., I have received more orders than I can fill in three weeks.

## TAFFY

AND VERY NICE TAFFY, TOO, SENT US BY FRIENDS

Who call the "Keystone" the best journal for the trade, and don't miss the mark much, either.

C. S. SPRINGER, Woodstock Hill, Conn., sent in a number of names, saying: "You see I like the paper so well I want my friends to have it."

ERNEST BRUNAT, Keokuk, Iowa: "Please find enclosed one year's subscription. I have a son learning the watchmaking and engraving art, and consider your paper a great help to a new beginner."

F. W. MOORE, Waupun, Wis.: "I am taking several trade journals, but for valuable and concise information the KEYSTONE takes the lead. Please enter my name on your list for 1887."

GEO. F. APPLGATE, Trenton, N. J.: "Enclosed find check. Please send me your book on pivoting and balance for subscription to this year's paper. I appreciate it very much."

S. C. DAVIS, Dexter, Iowa: "I can not well do without the KEYSTONE. I look for it every month as regular as I do my three meals a day."

GEO. MILLER, Riverside, Cal.: "The KEYSTONE will please put me on its list of subscribers until further notice. If you ever open the doors of 'Our Workshop' to the trade in book form, please send me an invitation to 'walk in' for one copy."

F. L. DOLLOFF, of Jefferson, Ia.: "Allow me to congratulate you on the improvement in the KEYSTONE for March. It will now be suitable for binding, which will save taking two copies for scrap book purposes, which I have heretofore done, in order to get at good matter printed on both sides."

M. ZINEMAN & BRO., N. W. Cor. Seventh and Chestnut Sts., Philadelphia: "We are satisfied your paper must be read all over the country, judging from the many replies we have received from our card in your paper. You may look upon us as indefinite advertisers."

E. P. LEDOUX, Silver City, New Mexico: "Please stop my ad. 'Watchmaker Wanted.' Your paper is most too good an advertising medium. I have received 87 letters in answer to my ad. It has kept my clerk busy writing most all the time. I have secured a very good man through your paper."

JOHN W. GABRIEL, Halifax, N. S.: "Enclosed find two year's subscription. It is just the thing wanted for the jewelry trade, and contains everything you want to know in concise form. Will always take it."

L. W. KEIL, of Rockford, Ill.: "Please take out my 'Ad.' Have sold out. Can't answer all letters received from all parts of the country."

J. W. HUBER, Ashland, Pa.: "It is not necessary to put my ad. in March number, as we had a cord of answers to our ad. in the Feb. number. Have sold to one of them who will take possession on April 1st."

MRS. L. KUPFER, Dillon, Montana: "It is beyond a doubt in my estimation the very best paper published for the trade and workmen."

J. E. MCKEE, Rensselaer Falls, N. Y.: "I find the KEYSTONE a valuable paper to me, and would give four times its price before I would do without it."

W. H. LEONARD, Pittsboro, N. C.: "I find it one of the most interesting papers published for the jewelry trade."

F. G. HALL, of Heuvelton, N. Y.: "Your last paper is a great improvement to the old style and double the amount of news. I would be willing to pay four times the amount if it were published weekly. I can hardly wait for it. The workshop talk is worth double the price of the paper alone."

MARYATT & MARKELL, of Red Cloud, Neb.: "We send our notices for publication in your paper because we think it the best paper published."

G. S. HOLLENBACK, Chebanse, Ill.: "The best of all. I take five journals, and think the KEYSTONE the best. Like the Boss case I think it the best because it sells the easiest, and everyone thinks it the best, because it has been tried and it stands the test."

C. F. MITCHELL, Noank, Conn.: "I think everybody in our line of business ought to subscribe for the KEYSTONE. I have two I got from a friend of mine to read, and I think they are just about right. I would like to commence with this month's paper."

H. B. CONYERS, Oneida, N. Y.: "I think my year for the KEYSTONE has just about expired, and I feel as though it would be impossible to get along without it. Please find enclosed the small sum you ask for the paper for another year's subscription."

R. W. THOMPSON, Petersburg, W. Va.: "Not knowing just when the year expired for the KEYSTONE, I enclose my subscription for another year, as I cannot bear to do without. It is part of my life."

G. H. TERPANY, New Carlisle, Ind.: "Enclosed find note for two years renewal of my subscription to your valuable paper. Of all the periodicals which come to me, the KEYSTONE is the most valued and useful."

J. W. PRITCHARD, Richie Court House, W. Va.: "Of all publications for our craft, this is ahead of any as to price and excelled by none in other respects. If the general make-up throughout the year is as good as sample copy I received for January, count me in."

FRED. W. OSGOOD, of Leominster, Mass.: "It is evident that your efforts with the KEYSTONE are appreciated by the enlargement of the sheet, and I see no reason why it should not continue to grow, as you certainly make it by far the most interesting of any paper yet published for the trade. Let the good work go on and you will reap the harvest you so richly deserve."

J. H. BATE & CO., of Acworth, Ga.: "We are very much pleased with the KEYSTONE's new appearance, but more so with the information derived from the valuable paper. We think that every well regulated jewelry firm needs it in their business."

A. B. PARKER, of Norristown, Pa.: "I desire to testify to the great value and popularity of the jeweler's friend, the KEYSTONE. As the result of a single insertion in the last issue of this paper, I have received no less than 25 replies, coming from New York, Vermont, New Jersey, Pennsylvania, Long Island, Maryland, Ohio, Illinois, Missouri, Iowa, and Mississippi. This in my estimation, is a grand testimonial to the worth of the paper. For, when live business men take the time to read a whole paper through, even to the advertisements, it must be a good paper indeed. I take pleasure in recommending anyone who has anything pertaining to the trade, either to be bought or sold, to advertise in the KEYSTONE, and I predict for such advertiser an agreeable surprise."

P. S. PARK, of Mexia, Texas: "Allow me to extend you hearty congratulations on the greatly improved appearance of our welcome visitor, the KEYSTONE. It has always been chuck full of the choicest trade items, and in its enlarged form, it is doubly attractive, on account of the extra amount of matter it contains. I have been a reader of it for several years, and have become so attached to its welcome 'phiz,' that I don't care to be without it any more. I don't know when my subscription expires, but you will find \$1 in currency enclosed, to be placed to my credit, and when that is exhausted, will send more. If you are running a life list, put me on it, as I expect to be a workshop companion as long as I am in business. If 'our workshop' is ever published in book form, I would be delighted to have one. Accept my best wishes for the success of the KEYSTONE financially, as well as otherwise."



## THE JEWELER'S DREAM

A FABLE RELATED BY OUR MODERN ÆSOP.

A convention of the watch cases which decides that the Keystone cases are the best made.

"You are a liar!"

"You are another!"

Such were the startling exclamations that caused a jeweler to jump from his workbench, where he had been detained until after midnight. These words were accompanied by a great rattling of chains, turning of stem-winds, and snapping of watch case backs, which seemed to proceed from the watch repair board. Directing his attention there, you may judge of his surprise to see all the watches left for repairs in great agitation, and seeming to the excited jeweler as if they were trying to get at each other. Just as he was about to investigate the cause he was more surprised to hear a voice that apparently came from a solid 18 k. case exclaim:

"Silence! silence I say. I am tired of this everlasting clatter and controversy as to who is the best case. You ought to know that I am the best; you are all made in imitation of me. Yes, I am the father of you all. Yet, when I look at some of you, I cannot say in strict truth that I am proud of you. But the best thing to do is to let you all speak for yourselves; and I appoint the old grandfather's clock over in the corner as referee, and after you have all put in your claims we will let him decide who is the best."

The jeweler, greatly amazed, remained silent to see the end of this strange controversy.

In answer to the proposition of the 18 k. case, the old clock piped out:

"That's a good idea! A very good idea! Yes, indeed! I know all about you, and a sorry lot you are. You are not to be compared to a clock."

The 18 k. case again spoke up and said: "As silence gives consent, remarks are now in order, and I shall call on the cases of foreign make to speak first. As they are strangers, I hope you will give them a respectful hearing, and whatever make of case we are let us for once be gentlemen."

At this a Swiss watch from the bottom of the board spoke up and said: "A few years ago we held entire possession of this country, but the Yankees and native pride have driven us out of the pockets of the American people, and to show to what great extent that pride will go, I call your attention to the fact that we have been even succeeded by Waterbury watches."

"Will somebody wind me up!" exclaimed a Waterbury watch. "I want to get at that snide Swiss watch and give him a punch in the bezel."

"But," said the Swiss watch, taking no notice of the interruption: "I will close my case by saying there is room for all," which remark was received by a great jingling of chains and turning of stem winds."

An old English case then said: "For my part I don't see as how henny hoff you 'ave anything to brag about. I knows 'ow as holl of you Yankees are great blowers, but you are a rum lot, and when you wants to see as how a case should be made you wants to look at me; you does, my 'arties. I never looks at one of you chappies that I does not feel a pity for you, to think as 'ow you must go about with one of those Yankee movements in you; one of those 'orrid main-springs, while your English case has the pleasure hoff knowing as how he 'as hinside of 'imself a fusee."

At this point there was a violent movement on the part of the cases, and a cheap nickel watch advised him to wind up his

old fusee, and ask the clerk to call him at the next Centennial.

Then the solid gold cases had their say, and were followed in turn by a dozen or more of silver cases. After them came the filled cases, all of which began by shouting, "I am the best," etc.

Finally, order was restored by the 18 k. case, who said: "I don't know whether filled cases ought to be allowed to speak or not. For my part I detest them; I abhor them, and I very much regret—as do all my solid brethren—that the proprietor of this store is so lost to all decency as to hang them on the same board with us *solid* cases. But I suppose we must allow them to have their say."

Then commenced the filled cases, and such gigantic lies as they told were never heard. Their claims were astonishing. Indeed, to such an extent did some of them lie that a case belonging to a preacher became so agitated that it burst the main-spring of its movements.

After they had all finished the 18 k. case said: "Such lies as these filled cases have told is enough to make any well-regulated case get out of order, and I do not wonder that the movements in them need frequent cleaning. But I notice the James Boss case has said nothing yet, and as we all have such great respect for him I move he be called on, as you all know he is received into the best *solid* society, and so conducts himself that few have been able to distinguish him from one of us."

"Yes, by Gar, zat is so," chimed in a French clock, "he is vat you call a dandy."

"Well," spoke up a handsome 18 size top and bottom Boss case from a prominent place on the board, "I am not much of a speaker, but I have a few facts jotted down that I am glad of this opportunity to free myself, and if in doing so I tramp on your joints I hope you will excuse me, for I have heard remarks here to-night that almost made my cap fly off with indignation, and in such an assembly of good cases, bad cases, and snide cases I may say things that you will not like, but that will fit your cases much better than you ever fit any movement."

"Hooray!" squeaked the old clock.

"What's the matter with that old clock," growled the Waterbury watch.

"I'll bet a minute hand that I can be wound up quicker 'ner you," the old clock replied.

"Silence!" shouted an alarm clock, "I want to hear that Boss fellow talk."

"Well," said the Boss case, "I was brought into the world about twenty-five years ago by one James Boss, without causing any very great excitement. Yet all who saw me liked me. We took things easy, and went along for a number of years pleasing all who knew us, and ignored by all case makers."

"By Jovel!" exclaimed a dude's solid gold case, "I thought that Boss fellow was solid gold. Why I introduced him into some of our best society."

"Will some one knock that dude's watch off his hook?" exclaimed an eight day clock over in the corner.

"Well," said the Boss case again, "it seemed as if we were going down to unknown graves, as no manufacturer appeared to appreciate us. But by a lucky chance a gentleman by the name of C. N. Thorpe came along, saw us, liked us, bought us, and proceeded to make us. Well do I remember the little room in the Philadelphia *Ledger* building where he first began, and the baker's dozen of employees that worked there. Things went slow, and I must confess that for a time looked very dubious. The case makers either ignored him or cried him down, and made all manner of remarks about snide cases. Well I remember the sneers with which he was greeted when he took his place in the rear ranks of the small case makers, and how we cases were jeered when we first made our ap-

pearance in the show cases of the jeweler, and your insulting remarks about stuffed cases. All that is changed now. Mr. Thorpe was not the man to stay in the rear ranks. He wanted to be at the head of the procession. So he determined to introduce us to the public, and hired thousands of papers to tell the people what good cases we were. He sent his missionaries out among the jewelers to show them how we were made and how much gold was in us. That our bows, joints, crowns, thumb catches, pendants and crowns were solid. That we had more gold in us than one half the so called solid. That we would be good wearing cases long after many of you had found your way into the melting pot of a brass foundry."

"By Jiminy, dot is so," exclaimed an excited old Dutch clock from the rear of the store.

"Well, the jewelers believed the missionaries, and the people the papers, and we stepped into the front ranks, and touched elbows with the big case makers, and crowded Mr. 10 k. case clear out of the way. We walked side by side with Mr. 14 k., and also knocked him out of many a pocket. Were we satisfied? Not much. We wanted to head the procession, and we did, and do yet."

"You bet your bezel, you do!" cried out a cheap watch belonging to an East Side tough.

"But I admit that to do this Mr. Thorpe had to recreate us, as it were. To do this he got all the improved machinery and methods that enterprise and money could procure. Instead of spinning us up, he struck us up, from one piece which makes our backs as hard as the cheek of a life insurance agent. Many parts of us are solid that were filled before; and that all might know us, he stamped us with a crown and scales, and as a further mark of his confidence he put in us a signed guarantee that we would wear for twenty years, and we can do it, and don't you cease to remember it."

"You bet your crown they can!" shouted a Leader case.

"Well, what was the result? The high-toned case makers began to admire us and to make base imitations, and I have heard some of them speak here to-night. Why, fellow cases, some of them have not gold enough on them to make a yellow joint for a Silveroid case."

"Go for 'em, cousin!" shouted a Silveroid from the top of the board.

"Why I almos' flew off my hook with indignation at the way some of these cases lied, but as their makers taught it to them, I suppose they must be excused. But I ask you all, and my old friend, grandfather's clock, included, if these makers have succeeded. Look at this snide filled case below me; the one in the corner, and also the beastly looking thing on my right hand; and I ask if they can be compared with me? See their bad color, shape and fitting! Snide, gentlemen, is the word. Snide is written all over them. I hear that at a meeting of movements the other day, it was resolved that they would never keep time for any one who thought so little of them as to put them in such cases. You all have heard the proprietor of this store say more than once, when looking at them, 'I wonder at any jeweler selling these 'bums.' I would not have a customer of mine carry one around in his pocket; they are a dead give away." You also remember what a row he had with Mr. Cheapbuyer a year ago. He sold him that measly-looking case down there in the corner, thinking at that time that all filled cases were good. In less than one year, Mr. Cheapbuyer comes in, and wants to know what in Hades he sold him that watch for. Why it had not as much gold in it as some of the solid Swiss watches."

"Ha! Ha!" chuckled the old clock. "Now I want to pay my respects to some

of you so-called solid gentlemen. Here is a case just below me that is hypocrite enough to wear a stamp on his back as guaranteed 14 K., U. S. assay. Is he though? Ask our friend at the assay office; he who judges us all. He will tell you that he can hardly find 10 K. in him. You say his face looks 14 K. So it is, but he is made up of many parts. He has the nerve to talk about filled cases. Here is another rascal on my left who shrieks out to every one, 'I am a solid 10 K.' Is he? Let's see. His back is 6 K. and his centre is 4 K. Yes, he is 10 K.; figures won't lie, they say, and 6 and 4 are 10."

"Some one knock that snide 10 K. off his hook," struck in a Howard regulator.

"Fellow cases, you who are solid, would be surprised to know how many kinds of solid cases there are. They are made up of all kinds of blue metal with huge springs to make them heavy. I heard the jeweler say to-day, that hereafter he meant only to keep my brothers, the Keystone 10 and 14 K. solid gold, as they were just what they were claimed to be, and that they were the best made, and had the best color and finish in the world."

"I also want to remind my friend, the solid 18 K. case, that while I thank him for his kind remarks, its no more than my due, for he is wearing on his back, a style of engraving that was stolen from one of my filled case brothers. I also wish to remark that this is getting to be quite a common practice. More than one solid gold case in here owes his beauty of engraving to the engravers of the Keystone factory, but which, I am sorry to say, was stolen. Why, gentlemen, some of the large companies, that used to make fun of us, and Mr. Thorpe's small factory, have stolen our designs, and put them on the backs of their snide filled cases to make them look like us."

At this time, there was a great hissing caused by the cases unhooking their main-springs, in order to show their indignation, and the old clock got so excited that it struck twenty-four o'clock.

"Some of the silver cases have done a great deal of bragging here to-night, and in behalf of my brothers, the Keystone and Leader cases, I want to say that there is not a decent silver case on this board, that is not made after the manner of my silver brothers. Why, it's only a year or so ago, that many of you were a sort of a cross between a tobacco box and a coal scuttle. You were made up of as many pieces, as there are kinds of gold in snide cases. You were fit for nothing. People even bought Swiss watches in preference to you, and anyone of you should take off your crowns to Keystone and Leader cases. Had it not been for them, you would still have been a reproach and a by-word. When Mr. Thorpe struck up his first-class silver cases, it meant the end of all snide silver cases. Although your manufacturers derided them, yet they were compelled to adopt them."

"And we were mighty glad of it," yelled every American movement on the board.

"It's no use to answer that Swiss watch. The knowledge of his own inferiority is punishment enough for him. I shall let him and my friend from Waterbury fight it out, confident that when the Waterbury gets his spring around the Swiss, it will settle the matter."

"As for that old pot-bellied English watch down in the corner, my cap nearly flew off with indignation at his remarks. I can only say that, while we have fools, cranks and duds in this country who will do anything, and the latter wear almost everything that's English, there is not one among the number who will wear an English watch. I heard the jeweler say that this old duffer is kept here as an example of what people used to be compelled to wear to know the time of day. I should advise him to drop his old fusee, and go have a Waterbury



movement put in himself. Then he could be hired out to some nursery to amuse children, who would be kept from crying trying to wind him up."

At this, the old English case became so mad that he flew off his hook, and falling on the floor, broke his old fuzee amid the jeers of all the cases and clocks in the store.

"In conclusion," said the Boss case, "I want to tell you that the little factory in which I was made, grew and expanded so, that Mr. Thorpe was compelled to seek new quarters, and to-day we are made in three large six-story brick buildings, and employ over six hundred hands. Mr. C. N. Thorpe is president; Mr. H. L. Roberts, secretary and treasurer; and Mr. Chappatte, superintendent. We have offices in Philadelphia, New York, Chicago, London, South America, and Australia. In fact, the world is fast waking up to the value of the Keystone cases, and will soon take no other. Fellow cases, I thank you all."

The old clock at once decided that the Keystone make of cases was the best, and that the Jas. Boss case was a "hummer."

This decision was received with a great jingling of chains, turning of stem winds, opening and shutting of backs. This aroused our friend, the jeweler, who found he had fallen asleep, and that day was breaking. He still insists that just as he awoke, he heard that old clock add the moral with which all fables are supposed to end. This was the moral: "Always buy Keystone Cases."

#### NOVELTIES IN JEWELRY.

The ruby-cut garnet is a desirable substitute for its more costly namesake, as it possesses considerable brilliancy and richness of color.

Penknives, keyrings and pocketbooks of silver and gold, or with silver and gold mountings, now occupy considerable space in show windows.

A very flexible bracelet is now made of small, round button-like links in some ornamental finish, fastened together by pairs of interworking eyes.

Pearl-centered and stemmed geranium leaves are favorite forms in black onyx earrings. Three such leaves ranged in a row make a pretty lace pin to match.

A very slender elastic wire bracelet now in request has two horseshoes of diamonds and other stones set with beaded edges close together on the overlapping ends.

Rich smelling bottles in enamel work, heavy chasing or plain glass, with diamond-set top, sometimes costing as much as \$500 or \$600, are among the luxuries which the jewelers now offer.

Fine artistic enameled work is more popular than ever. Large carnations and similar flowers, with the oscillating dew drop glistening on the leaves, make strikingly brilliant pins or pendants.

In accordance with the growing custom of displaying gems to the best advantage, very fine chain necklaces, scarcely distinguishable, to which rich pendants are attached, are much in vogue.

A pretty bracelet ornament of recent design consists of two series of graduated balls, one on each side of the wire, forming an oblong oval figure, with a row of diamonds or rubies between.

The prevailing styles in men's vest chain are the two-strand, with or without seals in the centre, the fancy French link, and the platina and gold combinations, in the French and also in the usual style.

Now that the Russian tableware in gold is so much prized here it is not strange to see some of the most beautiful and characteristic patterns of this ware reproduced on link buttons and other articles of jewelry.

The most unique insect pin is a beetle, a split carbuncle representing wings, while small diamonds in silver settings glitter on the head and body.

#### OUR WORKSHOP.

##### QUIETEST CORNER OF THE BEST PAPER IN THE TRADE.

Knotty problems solved in a way to satisfy the dullest scholar in our class.

In continuation of the answer to "Subscriber" in April number, the subject in hand being enameling, it has been the intention of the management of the KEYSTONE to give some instructions on enameling, and it might as well be done in response to "Subscriber" as anywhere. Before continuing the instruction, it would be well to take a glance into the nature of enamels, and the mode of applying them. Enamels are only very fine glass colored to suit the occasion or demand. Many substances, when fused or melted, form a glass of varying qualities. For instance, borax, which is a combination of boracic acid and soda, fuses into a glass, but it is easily destroyed. Acids attack it, and even boiling water dissolves it. But, as it melts easily, it is used to lower the melting point of other enamels. Care must be exercised as too much borax will lead to trouble. Most of the glass used is composed of silica (flint), potash, and lead: crystal glass containing the minimum and flint glass the maximum proportion of lead. The second flux or frit, spoken of in the April No., is only a double oxide of lead and tin, in the proportion of two parts lead to one part tin. In such enamels as have a strong tendency to opalescence, the quantity of tin oxide increases to such opaque enamels as constitute the white of watch dials, which has twice as much oxide of tin as lead. A compound of potash and lime also forms a flux for colors to which lead would be detrimental.

This subject will be continued in our next issue, when details and technical instructions will be given.

##### FROM A GREEN MOUNTAIN BOY.

"Practical," of Barnet, Vermont, says: "If you keep on adding to the thickness of your paper, you will have to add to the price of subscription. Let me say that it is the only live paper of the kind that I have ever seen. Your explanations and advice are practical, and up to the times. I am pleased with the KEYSTONE and have been tired out with quotations from, and reprints of Reed's Treatise and similar works, talking of watches that are out of date, and other things of the past. "Lightning Pivoter" advises turning blanks for staffs, hardening and tempering them, then finishing. It seems to me that it is easier and more practical to harden and temper a piece of wire, say No. 46, any convenient length (inch or inch and a half), and then a staff can be nearly finished before it is cut from the wire as it is held in the split chuck. The lower end (the one taking the roller) can be entirely finished and glassed, and the other end cut to length and almost exact size before it is cut off at the extreme end of the upper pivot, needing only a little work after it is turned. When tempering blanks, unless very careful, you may overheat the tips and injure the quality of the steel. When turning a tempered piece of wire, it cuts easy enough; takes hardly any more time than when soft; and the steel is all alike throughout. It takes no more time to harden and temper a piece of wire, than it does to harden and temper a single blank. I find it much more satisfactory. Now, can you tell me the best way to remove soft solder from gold that must be hard soldered? For instance, the gold tips of chains that have been soft soldered on, and require a new eye, as the original one is worn out. Also tell me the best way to get the gold out of a plating solution that has become over alloyed from use—it has too much silver

and copper, and I fear a little tin from an accident?"

To the inquiry in the close of this letter the "Lightning Pivoter" says: "For dissolving soft solder from silver or gold goods, take 2 oz. copperas (sulphate of iron), 1 oz. saltpetre, and 10 oz. water. Reduce the copperas and saltpetre to a very fine powder: Put the pulverized salts into an iron vessel and add the water. After boiling for some time, let the mixture cool, and crystals will rapidly form. If all the fluid does not crystallize, reheat, when it will do so. Take of these crystals, 1 ounce, and add to 8 oz. of muriatic acid. Shake well and take 1 oz. of the acid mixture, to which add 4 oz. of boiling water. Keep the mixture hot and immerse any article contaminated with soft solder. In a few minutes, the solder will be entirely dissolved."

##### TWO BIRDS WITH ONE BRICK.

W. P. Dickie, of Bunker Hill, Illinois, writes: "I have been reading your 'Workshop Notes' with interest, and look forward each time to the next issue of the KEYSTONE. I would like to know a good test for silver, or how to tell old silver, from German silver and other metals."

In the same mail came the following inquiries from G. P. Horne, of Portsmouth: "What is the proper way of testing silver? What is the best gauge for ascertaining the length and diameter of staffs, also for pivoting and general use?"

In answer to both the above communications, the "Lightning Pivoter" says: "The acid used to test silver is usually nitric acid in which is dissolved all the silver it will hold, consequently the acid will not attack the silver to which it is applied. The objection to this course is, light decomposes the nitrate of silver. Persons who deal in old gold and silver usually test with pure nitric acid judging of the quality of the silver by the appearance of the metal where the acid is applied, as, for instance, if nitric acid be applied to coin silver, it blotches the surface, but does not boil up green, as it would on German silver or brass."

A few experiments on scraps of different metals will soon set you right even to judging of old silver spoons which are frequently alloyed below coin standard. There is no pivot gauge which combines the qualities you mention that get at the heights and also show pivot and staff diameters.

A NICE gilding can be done by dissolving gold and copper in aqua regia (2 parts of muriatic and 1 part nitric acid). The proportion of copper to the gold, is 1-5th. The saturated solution of gold and copper, is poured on linen rags, as long as the rags will receive it, when the rags are dried and burned. Any article of brass, or German silver, can be gilded by simply moistening and rubbing on the ashes of the burned rags. A wet cork is the thing to apply the ashes with.

QUESTIONS and suggestions have been received about the hard soldering fluid receipt given by James Lawrence of Rock Rapids, Ia. The receipt should read  $\frac{1}{2}$  oz. boracic acid,  $\frac{1}{2}$  oz. of boric soda (common borax), 15 grains of muriate of ammonia (sal ammoniac), 3 oz. of soft hot water. All parts to be soldered must be absolutely and perfectly clean. In order to preserve the color, the article should be painted with the solution, dried off with heat, and repainted. The idea is to get a good coating of the solution on the job both at the place where the color is to be preserved, and at the place to be soldered.

THE etched names on sword blades and the like is done by protecting the surface to be left bright with some resinous substance like shellac, dissolved in alcohol, or asphaltum varnish, (asphaltum dissolved in turpentine). The shellac is about the most practical. The idea is to protect all the surface of the steel, except where it is to be etched. And the best way to apply the acid, (nitric acid diluted with 15 or 20 per cent of water), is a bath or dish large enough to receive the article to be etched. The time required is proportionate to the depth to which the etching is to be carried. In many sword blades the etched surface is also gilt. This is done by dissolving gold in nitro-muriatic acid to saturation. To this solution is added sulphuric ether; 3 oz. of ether to one of gold solution. The mixture is well shaken together when being left quiet the ether which now contains all the gold will rise to the top. Any bright steel article will be instantly gilded on immersing in this ethereal solution of gold. Where many articles are to be etched in duplicate patterns a rubber stamp can be used to apply the resinous protection.

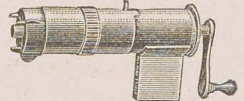
THERE is (says a London correspondent), a wonderful watch on view at a shop near Charing Cross. A more elaborate and costly timepiece has not been produced for many a long day, I should say. It has been made to the order of the owner of Riversdale, the winner of the Manchester Cup last year and is intended to commemorate that triumph. On one of the inner cases of the watch is a representation in enamel of the horse in question. The watch plays many parts, gives the time of the day by seconds and sections of seconds, and it is presumably intended to go on for ever without correction. Its great cost, however, is due more to its outward adornment than to its internal machinery, intricate and complete though it may be. The net cost is, I understand, £2,400, but this is not surprising when one discovers that the outer case is studded with huge diamonds.

THE Press, Newton, Illinois, speaks thusly concerning Samuel E. Updegraff, the local jeweler: "Mr. Updegraff came to Newton some few months ago and after his short residence here has found the place to be a desirable location and consequently decided to open out with a full line of goods."



Solid Asbestos Soldering Blocks, each Fifty Cents. Send for Circular.

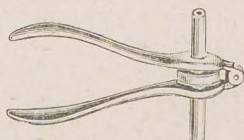
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Eureka Patent Mainspring Winder, \$1.50. Handiest tool for the purpose in the market. Recommended by first-class watchmakers.

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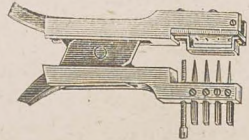
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Parallel Mainspring Punch. 4 punches: 2 round, 1 square, and 1 half-round. Price, \$2.50. Nickel plated, \$3.00.



## ENGRAVING MACHINE

AN INVENTION THAT WILL PROBABLY REVOLUTIONIZE THE ART.

Harnessed lightning brought into competition with the graver.

It is needless to observe that the present age is one of utility and progress, and will be ever memorable in the world's history for the number and value of its inventions. Within the last decade so many additions and improvements have been made to our labor-saving machines that the record of them is simply marvelous. We have become so accustomed to the announcement of new appliances to facilitate skilled labor that scarce anything, however wonderful in its practical results, is longer able to excite our astonishment. The records of the Patent Office are the best criterion of the great strides being made in the development of modern appliances, and the bare recital of the multiform additions to various classes of machinery during the period mentioned would alone constitute a volume.

Foremost among the agencies which the inventive genius of our race has utilized in promoting advancement in the realms of art and science, and in enhancing the resources of skilled labor, that of electricity is patent and pre-eminent. We need not now refer to the wonders of the telegraph, land and sub-marine, for that is comparatively an ancient invention; but the perfection and utility of the telephone and electric lighting are marvels of recent development, and though astounding in their uses and results are now hardly rated beyond common-place inventions, in view of the vast and intricate possibilities of the application of this subtle and ubiquitous motor.

In the art of engraving as in other branches of human industry, many notable and important additions and improvements have been brought into requisition during the last few years. The purpose of the bulk of these inventions was to shorten the labor of preparing and executing the work by increasing the resources of the workman. Incidentally, though the cost of engraving has been lessened, the income of the engraver has not diminished, owing to the facility and expedition with which his operations are conducted, and the consequent enhancement of his performance. Improved machinery is never permanently detrimental to industry.

Engraving is not now what it was when the writer was initiated in the rudiments of the art. Then, as now, the work had to be neatly done and that the completed job should appear as perfect and accurate in its essential requirements as our patrons of the present day exact, but the methods by which it was produced were by no means similar. The operation was less complicated, but at the same time less practical and effective than they are to-day. The means for accomplishing the desired results were not so numerous or so highly developed as modern invention has placed at our disposal.

The writer has endeavored to keep pace with the progress of mechanism, and not only has he utilized each new tool and improved appliance in the business but has, in his capacity as instructor, brought these improvements to the notice of his pupils and readers, and demonstrated their utility and value as aids, to the extent they appeared to deserve. He has never taken the estimate of the inventor or manufacturer, who is naturally interested in proclaiming—sometimes exaggerating—the merits of each particular novelty or specialty, but has uniformly subjected all such to fair and practical tests, and given judgment in accordance with results.

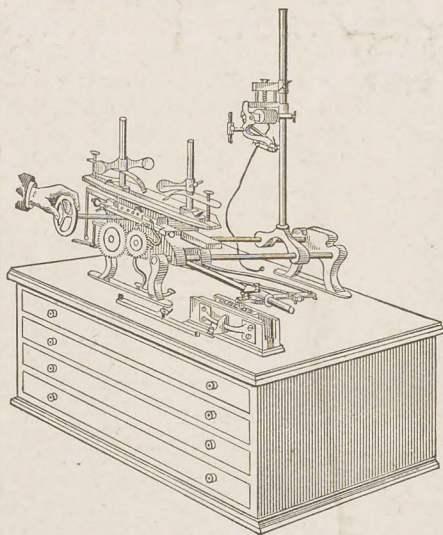
We have occasionally, in the columns of the KEYSTONE, directed our readers'

attention to particular points and methods connected with the art which we deemed of interest and profit to those whose instruction was chiefly derived from such sources. Unbiased as to the choice of tools, and disinterested as to the conflicting claims of rival inventors and manufacturers, our only anxiety has been to lead our pupils to adopt only the really meritorious

We propose, in the present paper, to briefly refer, without analytical and critical discussion, to another device in the line of facilitating engraving, which promises to revolutionize the art, when its extraordinary applicability and automatic precision of execution are known and appreciated. The machine is an evolution of various preceding appliances of the same character, or of previous contrivances to achieve similar results; but in the opinion of the writer it is such an advancement on its predecessors as to practically supersede them, and is destined to become extremely useful and popular.

The idea of an engraving machine is nothing very new. We have examined and experimented on some years ago, but for various reasons we declined to recommend them. But the world moves, and one improvement after another has been added, till the one under notice seems to be the best engraving machine. It would be difficult, however, to attempt to circumscribe the operations of inventive genius.

The machine we speak of was invented, in a far more crude and less practical form, however, about five years ago. Only last winter it reached its final development, and the perfected machine is as yet comparatively unknown to the great mass of engravers, whose ideas of development in the appliances of the art never extended beyond the use of the graver, with its varied concomitants.



The price of the machine will necessarily deter numbers of ordinary workmen from adopting it, and the graver will, therefore, remain as heretofore the principal tool in the hands of the average artisan; besides it will always have its special and peculiar sphere in the art and cannot be dispensed with. But the marvelous utility of this machine, and its great adaptability to various classes of work must commend it to those who appreciate a vast saving of time and labor, and also to those who, with little knowledge of engraving, wish to perform work artistically excellent and mathematically accurate, with a minimum of trouble. Jewelers who wish to do their own engraving must feel especially interested. It will repay the outlay in a very short time—if our estimate of its powers, formed after a thorough examination of it, is borne out by uniform excellence of execution.

Although it is our province to teach the use of the graver and its adjuncts, and hence it may be in conflict with our financial and material interests to advocate the adoption of any substitute therefor, still, adhering to our principle of

keeping the profession—especially that part of it for whom we usually write—posted on all notable inventions and appliances connected with the art, we herewith give a few of the leading characteristics of this novel addition to the facilities which invention places in the reach of the engraving fraternity.

This engraving machine has for its chief advantage that it is easily manipulated. Its various parts are harmoniously adjusted, so that each and all respond to the touch of a single lever or key, just as the telegraphic operator clicks his message over the circuit. He may work mechanically and rarely reflect on the mighty and mysterious agency he employs in the routine of his duties, but he communicates living language instantaneously along the insensate wires just as if he had explored the labyrinths of the science. So with the engraver or jeweler who uses this machine; he may not understand how it can engrave automatically—but it does it!

It is called the electro engraving machine, and as its name indicates, its motive power is electricity—that occult agent the extent of whose instrumentality can hardly be conceived, even by profound and expert scientists. It can perform engraving not alone on the ordinary run of metals, such as gold, silver, copper, brass, iron, etc., but also on hardened steel, glass and all species of stone; upon every kind of ware, whether of convex, concave or flat surface, and in any form of lettering, scroll or ornamental work desired to be placed on any article. This is a pretty extensive programme, you will say; but it "fills the bill" every time.

The power, as before stated, is supplied by batteries in the usual way, and we need not dilate on this feature, as however the arrangement of the motor and working portions of electro-machines may differ, the principle in all is substantially the same.

The machine occupies a space of about two feet square, and is mounted on a black walnut cabinet furnished with drawers and receptacles for the cells that constitute the battery. The magnets are not unlike those employed in the usual telegraph machines, and all on the surface. Upon a perpendicular rod or arm in the rear is fixed a movable and adjustable contrivance for holding the graver which does the work. In front is a wheel easily operated by hand, which adjusts the bed-plate and clamp wherein is the receptacle for the article to be engraved. When the article is placed in position, under the graver, the work is conducted by pressing a key which communicates with the magnetic current, and the latter operates the graver in the manner desired to cut the letters or whatever is intended to be produced.

In front, at the right, is a place for inserting any desired figures, such as letters, scrolls, monograms or anything in that line. A steel tracing point is used to travel over each line and curve of this lettering or other design, and the graver faithfully follows every movement of the steel point and cuts the corresponding lines or curves, as the case may be, on the article on which it operates.

There are adjustable chucks fitted back of the bed plate to receive and hold in proper position every kind of article ordinarily sold by the jeweler, including thimbles, rings, cups, goblets, etc., so that the range of its services comprehends every article in ordinary use.

There are levers and adjusting screws which operate the movable parts, so that the utmost exactness is ensured. Very little practice is necessary in order to lead the engraver into a thorough understanding how to manipulate this machine, so as to perform results which he would be years in trying to produce with the old manual system.

I have thus far given a mere outline of

the machine, and do not desire to transcend in this article the limits which the indulgent editor accords the writer in his usual art disquisition with his numerous readers. I may have occasion, if the subject seems to demand the labor, to return to this matter, and give a more minute explanation of the mode of operating the machine, and furnish a more perfect description of its various parts, and how the work is performed.

GEO. F. WHELPLEY.

THE jewels which were recently made in Germany for the Empress of Japan are said to consist of a diadem, a necklace and several bracelets. The diadem contains 600 diamonds, nine of large size. The centre stone weighs nine carats, and is valued at 25,000 francs, while the large stones are so mounted that they can be separated and worn as brooches. The necklace is a *riviere* of three double rows, containing 140 diamonds, all of singular purity. The bracelets, which are of silver, are ornamented with the various precious stones now in vogue.

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THE self-reliant merchant, while not above learning from others, keeps his own counsel, trusts principally to himself to make his business succeed.

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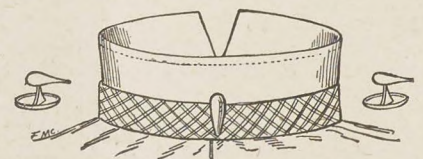
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### Watch Case Repairer.

Jewelers desiring first-class workmanship and prompt attention will find it to their advantage to give me a trial. Jobs sent me by mail or express will be repaired and returned promptly. Engine Turning, Springing, Joining, Polishing and general repairing neatly and quickly executed.



A GRIP WORTH KNOWING.

By referring to the cut in this column you will see how an ingenious contrivance, patented by Mr. J. P. Delany, of No. 2 Astor House, holds down the rebellious necktie. This collar-button grips the necktie and holds it in a clutch from which there is no escape. The invention is very appropriately called the "Grip."



PERSONS wishing to attain a knowledge of the Engraving Business, and who want to procure the necessary tools, books, and accessories of the art, should write us particulars and we will help them in selecting just what they require, on favorable terms.

### GEORGE F. WHELPLEY,

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Engraver and Supply Depot. Designs furnished per order. Badges, Bangles, Medals, Self-Inking Rubber Stamps, Seals, Dies, Etc.



## BALLAD OF THE WATCH.

A watch in a musical way  
Ticked a song that sounded like rhyme;  
It marked off the hours of the day;  
The hands pointed over to time.  
The watch, in itself, was sublime,  
Its wheels were a wonder to see—  
Turning on, through cycles of crime,  
When given a twist of the key.

Old Time is to fickle to stay.  
He cares not for nations or clime;  
To him is the sun but a ray  
Formed to warm him back to his prime—  
When he weeps it's but for the slime;  
He dreams of a life that is free,  
Yet there're bells that ring a sweet chime  
When given a twist of the key.

A watch, in its tiresome old way,  
Ticked a tune as tiresome as Time,  
With never a word it could say  
Untainted by dust and the lime.  
Uncovered by ages of grime,  
But its wheels were wheels as wheels be,  
Clogs useful if not each sublime,  
When given a twist of the key.

ENVOI.

Prince, buy this poor verse for a dime;  
No worse are you likely to see:  
If sense has made way with the rhyme—  
It's merely they seldom agree.

C. E. S.

## A GREAT RAILROAD COUNTRY.

"I've just been doin' an odd bit of figurin'," remarked a brakeman to a Chicago *Herald* reporter. "By actual count I've found that there are now 30,660 railway stations in the United States at which agents are stationed. A good many? You bet it is. Why, just think of it; that's one station for every 1,800 people the country through. In the big cities, the proportion is much smaller. In a place like Chicago, for instance, there are only half a dozen stations, suburban stopping places not being counted, for 725,000 people. In Illinois, outside of Chicago, there are nearly 2,500 stations. S'pose a traveling man should start out to visit all the stations in the United States; say he could make two stations a day; how long would it take him to make the grand rounds? Only about 50 years. And by the time he got around, there'd be enough new stations to keep him goin' 50 years more. This is a mighty big country. Chicago has a greater number of railroads than any other city in the country, or the world, and the biggest ones too. Chicago has 20 roads, St. Louis and Cincinnati 14 each, New York 13, Boston and Philadelphia 12 each, Pittsburg 11, Buffalo 10. Some of the smaller towns are pretty well fixed for railroads, too. Columbus, Ohio, has as many as Boston or Philadelphia, and Dayton, Ohio, and Minneapolis have nine each. The greatest railroad town for its size is Decatur, Ill., which has seven roads and a population of 10,000. I've heard that in the Illinois insane asylums, there are about 400 people from Decatur, all made crazy by trying to keep up with the changes in railroad time tables."

A NEW-FANGLED notion is to place a miniature tin-type of the young gentleman on whom a lady has set her affections in the centre of a large apple and hang it, at midnight on the first day of a month, from the blind of her chamber window, to be left there until the apple becomes rotten, when it is supposed that the desired solitaire engagement ring will put in an appearance. The believers in the new way and means to hurry up a tardy lover, probably surmising that it would not always turn out satisfactorily, claim that the charm will be broken if the person who hangs out the apple looks at it again until it is rotten and the picture drops out. Before trying the experiment it would seem to be a good idea to learn the time required by the average apple to become decomposed, so that the fair experimenter may run no danger or risk.

THE late John T. Raymond and his wife were once engaged to open the season at Lafayette, Indiana, and a company from Chicago was to support them. When the night came the company was not there, but the house was crowded and the manager was nearly crazy. Something must be done, but there was no one to do it but Mr. and Mrs. Raymond. "I went out before the curtain," said that genial comedian, telling of it in after years, "and frankly told the audience what was the matter. They were good-natured and expressed their willingness to put up with anything. What do you think we did? Boys, my wife and I played five farces for them that night, without proper scenery, costumes, rehearsals or anything else. The performance began at 9 o'clock and lasted till after 1 o'clock. I never acted, I never will act better in my life than I did that night, and my wife, she was the greatest dramatic artist on earth then."

MANY of the historical paintings of the early history of the United States were the productions of French artists who became interested in American affairs through the friendly relations between France and the United States. One of these paintings is in the studio of Albert Bierstadt. It is a sea scene by Baron Gudin. It depicts an incident of the War of 1812, and represents the old double-decker ship of war, Independence, which was the first one of its class built for the United States, dropping anchor and firing a gun off Gay Head. Baron Gudin, with the spirit of adventure for which the Frenchmen of his time were noted, entered the United States Navy as a midshipman early in this century and served for two years on board an American ship. It was during this time that he developed a taste for marine painting.

PEARL fishing on the coast of Lower California is an important industry, no less than 1,000 divers being employed in bringing up the costly black pearl, which is found in a state of great perfection in the deep waters of La Paz. The pearl oysters are found from one to six miles off shore in water from one to twenty-one fathoms deep. Merchants provide boats, giving apparatus, etc., for the prosecution of the business, on the condition that they can purchase all the pearls found at prices to be agreed upon. These boats, which are usually of five tons burden, sail up and down the coast, from May to November, searching for treasures. The product of a year's work is about \$500,000, estimating the pearls at their first value.

AS GOLDSMITHS and jewelers the Persians are expert. The most skillful jewelers are glad to work for two shillings a day and the profit they can make on the very small amount of solder they are permitted to use. The Persian seldom buys his jewelry ready made; he orders it. When the various pieces have been cast or cut out from the metal supplied by the customer, they are brought to him for inspection and carefully weighed. Then the article is put together, either in the customer's own house and under his eye or under the supervision of his servant. Then it is again weighed, then chased and finished, the filings and waste being collected and credited to the customer.

A SINGULAR coincidence rounds out the tale of the late William H. Hunt's life. The first artistic effort of the boy Hunt was a drawing of a small boat on the water. His very last drawing depicted precisely the same scene and it was made but a few hours before he was found drowned in the little reservoir among the hills of the Isles of Shoals. What subtle fatalistic mental association and divination was this?

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LEWIS SWIFT, F. R. A. S., Director.  
Rochester, N. Y., March 20.

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# BUSINESS SUCCESS—HOW IT IS ACHIEVED.

There is no topic more frequently discussed among the younger members of the trade than how to succeed in business. We are assured by wiseacres that such opportunities as occurred ten, fifteen or twenty years ago are not now to be found. Now, young man, let me tell you this is not so. No better time than the present need to exist for any young man. Let me relate the trade history of a town of fifty thousand inhabitants in this State (Pennsylvania.) It is not particularly different from other towns, larger and smaller, of other States, except it may be a trifle more conservative, and consequently more difficult to succeed in. I have in my mind now seven young men of this town who "served a time," as the phrase goes, to the trade. Of this number two were admitted as junior partners to the firms they were with, and are doing well; three more are, or were, in business; and two are outside of the trade in a sense, as will be explained. I shall in this writing only deal with such as started for themselves. I will first consider the most successful man; and one incentive is that he started under the most inauspicious circumstances. His history runs about in this way: He served his time with a fair workman, but having a quick-witted disposition, and a faculty of picking up and adapting himself to the situation, he soon acquired a skill superior to the man of whom he learned his trade. After working as a journeyman a year or two he came back to his native town (the one of which I am writing) and borrowed *six dollars* to assist in commencing business. As I hinted above he was somewhat more skilful than most of his competitors, and to assist himself financially, had done work for the trade, going out into surrounding small towns to solicit work if he found a little unoccupied time. He was at this time a young and unmarried man, and handicapped with a widowed mother and an unmarried sister. One thing in his favor, his mother and sister were somewhat like himself, of an independent nature, and in most instances took care of themselves. When other young men had time to loaf and smoke, the young man of whom we are writing employed his time to his profit. His advance was slow but sure. For the first two years he made but small effort to sell goods. True, once in a while some friend wanted a watch which he supplied on a margin. It was not long before wholesale men noticed his thrift and offered inducements and credit. But nothing could swerve him from the line of business conduct he had mapped out for himself. He persistently refused to buy more than he could pay for. After two years of this course his work rapidly increased, his sales also increased, and he put on just such stock as previous sales led him to believe he needed. To-day he is worth twenty thousand dollars, and a business worth four thousand dollars a year. He has now been married two years, and by the time he is forty years of age will have money enough to retire, but I do not fancy his active business habits will permit such a course.

This brief history only shows what pluck, push and good habits will achieve. Another of the number selected as examples can be pointed to as taking the course to be avoided. This last mentioned young man had far better prospects, more money, more friends; every circumstance and surrounding much more favorable. He also starts at about the same time with a fair stock of goods, and equal, or nearly equal, skill as a workman. But he was a good fellow; liked to smoke and drink, of course in all moderation (as he said.) A few years of promising success followed his starting for himself. Finally it was hinted so and so was neglecting his business. Next, so and so's notes had gone to

protest. A short way to tell the story is to say the same number of years which saw and recorded the success of the first also saw and recorded the complete and absolute going to the dogs of the latter. The whole sum and substance of the condition of any young man going into business for himself lies in this: Will he submit to the *conditions necessary to compel success*. These conditions are few and not so very irksome, if the final result is to be considered. To enumerate them: 1st. As good or better knowledge of your business than the average of your competitors. 2d. Live on less than you earn. 3d. Be punctual. 4th. Discourage—discontinue any course which can possibly lead to a bad habit. 5th. Be industrious; don't adopt the eight hour system because you are your own boss. If you have work to do, do it now—to-day, even if you have to work twelve or fifteen hours a day. 6th. If you are poor, always buy for cash. Do not accept credit though you are offered it. A few more maxims may be added, like stay single until you can afford a wife. This last seems cruel when she loves you so much, but if she is the right sort she will wait and encourage you, instead of being an expense and desiring you to load yourself with cares and responsibilities which encumber every married man.

Customer—"Are these good stockings?"  
Clerk—"Well, I should say so. You heard about the railroad accident out west where only one man was saved?"  
Customer—"Yes."  
Clerk—"Well, sir, when he got out of the wreck all he had on was a pair of stockings of this make. Six pairs? Yes, sir. Cash!"

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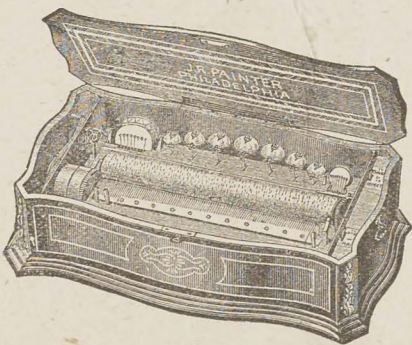
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### Boss Testimonial.

EDWARD R. MASON, Hallstead, Pa., writes under date of May 6th, as follows: KEYSTONE WATCH CASE CO.,

GENTLEMEN.—Your letter of 27th ultimo. was received in due time, and the package containing cases in question was received a few days later, prepaid. I am much pleased with the work done on silver case, and with your very generous action toward my customer, the owner of the Boss case, in replacing the old case by an entirely new one. The engineer who carries the new case said to me yesterday, as he pointed to the framed advertisement of the Boss case hanging in my store: "Those signs should be hung in the most conspicuous places, as they advertise a strictly honorable company."

## Keystone Watch Case Co.

PHILADELPHIA

New York

Chicago





## BALTIMORE BRILLIANTS.

A diamond merchant's fraudulent assignment—buying big, selling little.

The latest sensation of the Baltimore courts has been the thirteen days' trial of Jacob Castelberg for making an alleged fraudulent assignment. His long residence in Baltimore, his courtly manners, his wide acquaintance and active connection with numerous lodges, clubs and benevolent societies, together with the large amount of money at stake, made the case one of extraordinary interest.

But more than all, that he was defended by ex-Governor and Senator William Pinkney Whyte, against the claims of two hundred New York and New England creditors, has made it the talk of commercial circles throughout the country.

The counsel for the creditors was Colonel Charles Marshall, grandson of Chief Justice Marshall. The Colonel used chalk and a big blackboard before the jury, in open court to make the case clear, and the novel proceeding created a sensation.

Jacob Castelburg was for many years a pawnbroker in Baltimore. Since 1875 he has conducted a jewelry and diamond business in a small way. On December 28, 1886, he made a voluntary assignment to Thomas Hughes. Liabilities of \$59,274 for merchandise were shown, with no debts for borrowed money. His assets consisted of a bank balance of \$64; book accounts, \$3,780; merchandise inventoried at a cost value of \$26,757, but with an appraised value of less than \$20,000, and fixtures estimated at \$1,200; also household furniture, and dwelling, which was mortgaged. Mr. Castelberg offered thirty cents on the dollar in settlement.

His failure occurring immediately after the holidays his creditors requested an explanation of the deficit, and a committee was appointed to investigate.

Mr. Castelberg claimed to have kept no books, to have sold all the goods not represented in stock and to have applied the proceeds to the payment of his debts. He showed recent losses on outside investments of only about \$2,500, and claimed that his debts paid were for borrowed money.

Proceedings were instituted to have him adjudicated an insolvent debtor under the laws of the State of Maryland. A partial set of books was produced on the trial which showed that in 1883 he had sold goods which cost him \$21,241, clearing a net profit of \$2,294 above all expenses. At the beginning of 1886 he was shown to have had in stock \$22,000 and to have bought during the year to the amount of \$80,973. His sales were shown to be, at cost price, less than \$40,000. His purchases for the last four months preceding his failure were \$49,494. Payments for merchandise during that time were only \$9,000. It was shown that his business had been profitable each year since 1879, when he had represented to his creditors that he was worth \$25,000.

In addition to the disappearance of Castelberg's books it was found that in the latter part of December, when his cash receipts were largest, his deposits in bank were smaller than usual and that they stopped entirely three days before he failed, yet he turned over only \$7 in currency to his assignee. Three witnesses testified to the presence of a very large stock of fine goods, diamonds, gold watches and gold chains in the store up to the afternoon of Christmas, 1886. The witnesses also testified that when the store was opened on Monday morning goods to the value of about \$30,000 had been removed. The assignment was made the same day and completed on the following morning. It was claimed that Mr. Castelburg did not visit his creditors, nor attempt in the ordinary ways to secure a settlement. The committee sought him at his house, but obtained only a general

denial of fraudulent transactions. The taking of testimony for the creditors occupied about nine days. In rebuttal Castelberg offered little testimony—less than a day being occupied by his witnesses. He said "I don't recollect" to leading questions; he did not know how much stock he had or what debts he owed, nor how much he had sold or what had become of his books. He referred to losses and borrowed money, but was not definite as to amounts, nor could conclusions be reached as to what cause he actually attributed his failure. His testimony was conflicting, while his sons, Joseph and Henry Castelberg, also put on the stand, contradicted other witnesses in regard to the disappearance of the stock and books.

Four issues were involved. The jury found that on the first issue the defendant had not concealed himself to avoid service of process, but returned a verdict for the creditors on three other issues, as follows:—

*First*—Charging that he "had within the past four months assigned, given, sold, conveyed and transferred a portion of his estate and property with the intent to delay, hinder and defraud his creditors, and that he had also assigned, given, sold, conveyed and transferred a large part of his property, consisting of diamonds, watches, watch chains and jewelry, with the intent to delay, hinder and defraud his creditors."

*Second*—Charging that the defendant, "within the past four months while insolvent and in contemplation of insolvency, had assigned, given sold, conveyed and transferred unto Martin Emerich, Louis Sinsheimer, David Levy, Nathan Lehman, Daniel Schoolhaus, Emanuel Hess, Simon I. Rodberg, Henry Castelberg and Joseph Castelberg, Max Affelder and Solomon L. Auerbach, a part of his property, consisting of merchandise used by him in his business, and money, with the intent to delay, hinder and defraud his creditors."

*Third*—Charging that the defendant, "while insolvent and in contemplation of insolvency, and in the past four months, conveyed and paid away a part of his property and assets to various persons to whom he was indebted, whose names were unknown, with the intention and for the purpose of making an unlawful preference."

The trial was hotly contested; counsel lost no points on either side; the court room was crowded with spectators, among whom were many of the prominent merchants and professional men of Baltimore. The interest was great, because it was the first important opportunity for defining the new Insolvency law of April, 1886. Distinguished lawyers visited the court daily to note the judicial interpretation of disputed points. Unusual efforts seem to have been made to keep the case quiet.—*N. Y. Herald.*

## BY-PLAY BEFORE THE ALTAR.

"Now, John," said the bride, "I wouldn't get married at all if I didn't think I would blush at the altar. An unblushing bride is my pet aversion. But I'm afraid to trust myself. I don't scare easy, and would as likely as not go right through the ordeal as cool as a cucumber. What I want you to do is to say something startling, shocking—improper, you know—the instant we are ready to march in. 'That'll bring a blush, and then I'll be charming.'"

"But, wha—what shall I—" the numbskull stammered.

"O, I mustn't know beforehand, because I wouldn't get red. Only, don't be afraid to put it strong. This is important." Well, when the time came for her to be dreadfully abashed by an improper remark, he gently whispered to her: "Are you sure, my love, that your hoisery is suitable to the occasion?" That was his idea of what would shock a Knickerbocker girl! She was married with a blush on, however, but it was one of anger.—*From Clara Belle's Letter.*

THE KEYSTONE for twenty-five cents is the best investment you can make.

## DIAMANTA SPECTACLES AND EYE-GLASSES

Manufactured only by  
**M. ZINEMAN & BRO.**

130 S. Ninth St., Philadelphia, Pa.



IN GOLD, SILVER, STEEL, ARUNDEL, ROYAL ALLOY, NICKEL, NICKEL-PLATED, ZYLONITE, RUBBER, &c.

Agents wanted whom we will supply, free of cost, with Test Cards for fitting Glasses, Signs, Electrotypes, Circulars, life-size bust of "Young Augustus," and other advertising matter, sufficient to insure success, quick sales, and big profits. Prices range from one dollar per dozen upwards. Samples sent on selection. All goods warranted to be entirely satisfactory and accurately interchangeable. Opera and Marine Glasses, Lorgnettes, Reading Glasses, sets of Trial Lenses in Cases, etc. "Le Maire Rock Crystal" Spectacles and Eye Glasses. Samples sent on selection.



## JULIUS KING OPTICAL COMPANY,

No. 185 Superior St., Cleveland, O. No. 4 Maiden Lane, New York.

JULIUS KING, M.D. WALTER G. KING. BURNHAM W. KING.  
CLIFFORD J. KING.

H. L. WARREN Cashier. LEO. WORMSER, Manager, 4 Maiden Lane.

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Grinding and Special Order Department.

WM. ALLARDT. L. V. APFEL. M. J. HINDEN.  
P. APFEL. D. D. CLARK. B. HINDEN. C. WINKLE.

TRAVELING SALESMEN.

ADOLPH NEWMAN. FRANK D. BISHOP. HENRY F. JORDAN.  
HARRY G. SILVESTONE. HARRY VINCENT. DR. H. ROBINSON.  
HENRO D. PIERCE. CHAS. L. MERRY. EDWIN BECKWITH.  
GEO. H. BRISCOE. RODNEY PIERCE. CHAS. RINEHEIMER.

## FIRST.

We have made a general reduction in prices. This we are enabled to do by reason of our increased facilities in our manufacturing and other departments.

## SECOND.

We shall, during the year, introduce several new lines of goods that are as yet unknown to the trade, and which are controlled entirely by us, such as our improved "Combined Spectacle and Eye-Glass," a "Visual Detector," "Polariscope," "Foci Optometer," "Pupillometer," etc., etc.

## THIRD.

We appreciate the growing necessity of our customers having a more thorough knowledge of the proper method of fitting eyes. Our large and efficient corps of salesmen are thoroughly qualified to impart such instruction. We have the largest assortment of Trial Lenses in the world, with low prices. We keep all Specialties made in Eye-Glasses and Spectacles.

On receipt of business card, samples of all grades of our goods will be sent for inspection.

New York Office in Store of J. T. SCOTT & CO.

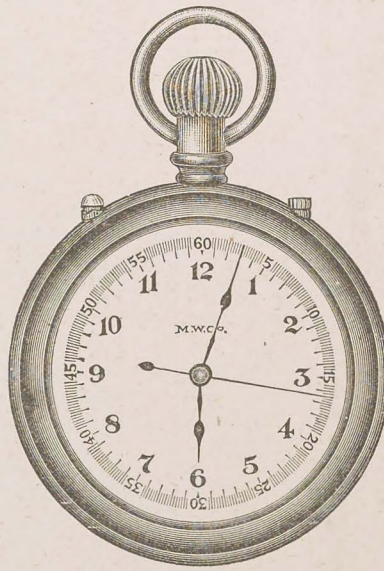
## MANHATTAN WATCH CO.

## Prices

## Nickel Silver

Plain, \$5.00 to \$5.50  
Sweep Second,  
\$6.00 to \$6.50  
Stop, \$7.00 to \$7.50

Catalogue with discounts  
and sample watches forwarded  
on application with business card.



Full Size Cut of Stop Watch.

## Prices

## Gold Plated

Plain, \$6.00 to \$6.50  
Sweep Second,  
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Stop, \$8.00 to \$8.50

All watches warranted  
in every respect.

234 Broadway, New York City.

Opposite Post-Office.

KING & EISELE,  
Manufacturing Jewelers, Buffalo, N. Y.

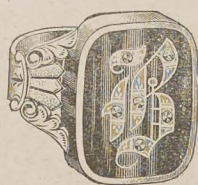
Deal in everything used and sold in a jewelry store. Manufacture all their own gold jewelry.

Initial Rings, solid gold,  
6 Diamonds, encrusted, - \$8.00.

Other goods at corresponding prices.

Goods sent on memo. to any responsible parties.

Factory, 2, 4, 6, 8 Swan Street. Salesrooms, 280 Main Street.





## DOTLETS.

—An English sovereign is considered the acme of watch-charm.

—The fly still obtains among jewelry devices.

—A new brooch represents a snake slyly coiled up in a spray of flowers.

—A French copper of 1656 was found in an old Langhorne, Pa., house.

—Maritime signals appear in new scarf-pin designs.

—The latest "snake ring" will fit any sized finger.

—The latest feminine charm is a nutmeg worn on the neck to avert disease.

—A mineralogist says there are heaps of manganese about Rome, Ga.

—John T. Raymond's coins will be auctioned in June.

## THOROUGHNESS.

It has been said that "genius is an infinite capacity for taking pains." This may truly be said of thoroughness, for no one was ever yet thorough without "taking pains." In purpose they may be; but to carry out their purpose they must take some trouble. There is no royal road to the certainty and assurance which are the results of a real mastery of one's subject, and which are unshakable by either the assault of sudden questions or unexpected demands for the display of one's power. This can be arrived at only step by step; and those who are looked up to as teachers and advisers, whether as regards art, science, philanthropic schemes, or anything creditable to the individual and useful to the world in general, must inevitably have so advanced—some with longer strides than others, it is true, but all alike making sure of one step before taking another.

## LIVE JEWELS.

All the old families in Carthage, writes a correspondent from New Grenada, South America, to the San Francisco *Chronicle*, have more or less servants, their former slaves or their descendants, to whom no wages are paid, who live in the lowest story of the house and provide for themselves in some mysterious way. The young ladies make up dulces or sweetmeats, which are taken out on trays by the servants and sold. The money obtained in this way is faithfully handed to the senorita of the house, who purchases the delicate fabric and pretty ribbons for the new dress, as she dare not make her appearance in the one previously worn. How lovely these dresses are ornamented at night with the cacullos (koo-koo-yos), the large and brilliant firefly of the jungles of the interior! When the cacullo is lively, it is the most beautiful of jewels in effect. A coal of fire is waved at the edge of the jungle, where the cacullo lives. The beetles flock to the light and are easily knocked down into the grass, whence they are picked up and put into a joint of sugarcane, where they get fat and lively, and are ready for use when wanted. The effect produced by trimming a mull dress with cacullo, which emit a strong and uniform light of an iridescent, greenish character, is very striking. Young ladies attach two or more cacullo to the knot of hair at the back of the head. After the ball, these jewels are carefully reimprisoned in the sugarcane until wanted again. At the commencement of the dessert, the ladies rise and retire, but just before doing so, a coal of fire is placed on the table and the young lady opposite the male guest deftly rolls up a cigarette and lights it, gives it to or three whiffs, and then with grace removes it from her lips to those of her male vis-a-vis. I attended

many balls without introduction, and approached any lady who struck my fancy, and solicited her hand for a waltz. They seemed to think it all right. It gives them an opportunity to flirt. One can say a great many flattering things without offending. Warmth of expression is looked upon as a compliment to the beauty of your partner, who is never displeased—at least, she never shows it. Singular to say, the same young lady may be met ball after ball, and receive your advances with approval, but she will not recognize you on the street. I never could induce any one of the ladies of the house where I lodged to walk out on the walls (the promenade). I was told it was contrary to the custom of the country and would compromise the lady, and yet I felt sure the girl would have given the world to marry an American.

"EXPLORING the interior of the earth on a gigantic scale seems to be the great idea just now of scientific men," says the London *Graphic*. "The well-known Parisian scientist, M. Camille Flammarion, suggests that a hole several thousand feet deep should be excavated in the earth in order to furnish accurate knowledge as to the composition of the interior of the globe. Let the European governments, he proposes, lend all their troops to carry out this colossal work, and by so doing two grand ends would be gained—the mystery under our feet would be revealed, while soldiers would forget how to fight."

THERE is a decimal clock in Wiesbaden which is constructed on the following principle: The day has 10 hours, the hour 10 decades, each decade 10 minutes, each minute 10 seconds, and each second 10 rays—thus dividing the whole day into 1,000,000 parts. A similar division is to be applied to the circle. Herr Moder, of that city, goes still further, and proposes to divide the year into 10 months—the even months of 36, the uneven ones of 37 days each. The advantages of this decimal system are placed in evidence, and the inventor hopes to see the same adopted before long in spite of the present opposition.

SPECIALTIES in fine gold and silverware, diamonds and other jewels are now being displayed in a number of beautiful artistic designs. Floral pins are shown in rare designs. The eglantine or wild rose, with pink enamelled petals and a diamond of the purest water resting in the centre, forms the design of one pin; another shows a white pansy, exquisitely enamelled to represent the natural flower, with a diamond set in the centre; twin pansies, a purple and a white one, form the pattern of another pin, and another is made up of a spray of pearls and of blue forget-me-nots.

THE light from an electric lamp tower at Davenport, Iowa, falls upon a flower garden about 160 feet away, and during last summer the owner observed that the lilies which usually bloomed only in the day opened in the night, and that morning glories unclosed their blossoms as soon as the electric light fell on them. It has frequently been observed that trees were most exuberant in their foliage on the side nearest the electric light.

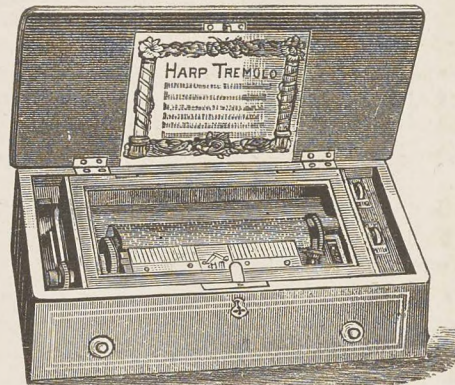
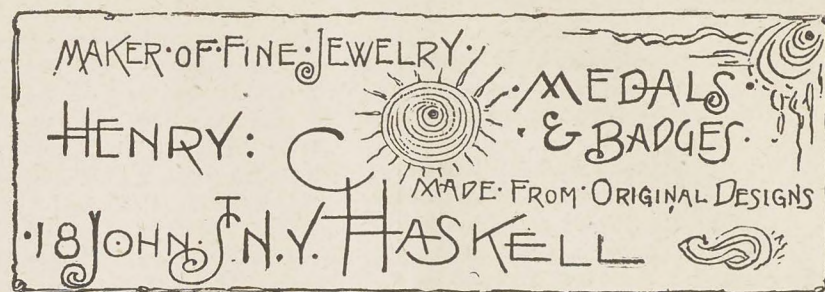
BOSTON YOUNG LADY.—"I want to look at a pair of eye-glasses, sir, of extra magnifying power."

DEALER.—"Yes, ma'am; something very strong?"

BOSTON YOUNG LADY.—"Yes, sir. While visiting in the country last summer I made a very painful blunder which I never want to repeat."

DEALER.—"May I ask what that—er—blunder was?"

BOSTON YOUNG LADY.—"Oh, yes. I mistook a bumble-bee for a blackberry."



Headquarters  
for  
**Musical Boxes**  
**JACOT & SON,**  
37 MAIDEN LANE, NEW YORK.  
All our Music Boxes are provided with  
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Send business card for Illustrated Catalogue. Send 25 cents for our book, "How to Repair Musical Boxes." Second edition. It should be in the hands of every watchmaker.



**I. BEDICHIMER,**  
Manufacturer of  
**♦ MASONIC MARKS ♦**  
Society Emblems, Pins and Jewels,  
616 CHESTNUT STREET,  
PHILADELPHIA.  
Highest award at Franklin Institute, 1874, International  
Exhibition, 1876.

**R. B. MACDONALD**

**Manufacturing  
Jeweler**

Fine Gold Plated  
CHAINS, CHARMS, BROOCHES, PINS, ETC.

Bates' Building, Union Street,  
Attleboro, Mass.

**Moseley Lathes**

**Beat All.  
In Many Ways.**

Three Standard Sizes for Watchmakers.

No. 1—No. 1 x 2—No. 2. All good.

Combinations and Prices to suit all.

Less than 1098 sold during 1886.

No. 1 Mosely Lathe for \$22, list.

Send for new Price List, and investigate all.

Eastern Agency with	L. HAMMEL & CO., New York.
Western "	NORDMAN BROS., San Francisco.
Northern "	RENT BROS., Toronto, Canada.
Southern "	ROCH & DREYFUS, New Orleans.
Central "	ALL JOBBERS, Chicago.

Manufactured by  
**MOSELEY & COMPANY,**  
ELGIN, ILLINOIS.



## A BOARDING-HOUSE EPISODE.

Everybody knew that dinner was nearly ready as the combined odor of boarding-house vegetables had become so painfully intense.

Old Mr. Rottle wandered downstairs on the early bird principle and took his seat. It may have been owing to the rain and rough weather outside, but the old man was not in the best humor. He acted as though the world had hustled him some and he wanted to drown sorrow in dinner. The bell rang as he sent a pair of foraging eyes about the table and the other boarders began to drop in. The Two Maiden Ladies were the first to arrive, then the Young Lady Boarder attended by the Bank Clerk and with everybody following.

No one noticed old Mr. Rottle's gloom. The Bank Clerk was in such high spirits that his sallies with the Young Lady Boarder occupied the attention of the table.

The elder Maiden Lady was shocked at such a flow of spirits and remarked it to her companion, who ate three olives and said it was scandalous.

As for the Bank Clerk he was in a reckless state. He devoured two plates of soup without scrutinizing the composition, and chatted affably across the table with the Young Lady Boarder.

"Had quite an adventure to-day," he remarked, spilling some cranberry sauce on the table-cloth and putting his butter-dish over the spot.

The Young Lady Boarder was all interest immediately, and so was everybody else, except old Mr. Rottle.

"You see when I was up in Connecticut last month," said the Bank Clerk, "I lost my umbrella. It rained so I had to sail into a country store and invest a dollar and eight cents in a family cotton. I had trouble with that umbrella right off. It wasn't spread ten minutes before the dye began to run and the water fell off the ribs in great brown drops, just as though it was raining molasses. I hurried to catch a train, and when I tried to furl that umbrella the stick was swelled; I had to climb on the back platform and it took me twelve minutes to get that Connecticut cotton together. To day I whittled the stick down and tried the umbrella again. There was a crowd on Wall street, but I was hurrying along and thinking pretty hard when a seedy old cove in front of me calls over his shoulder as angry as can be, 'Hey there, you young rascal, get your umbrella out of my collar.' and sure enough," added the Bank Clerk chuckling immoderately, "in the crowd a rib of my cotton umbrella had got wedged between the old party's neck and collar and was dripping molasses colored rain down his back."

At this point old Mr. Rottle turned red and suddenly put his hands to the back of his neck.

"You young wretch," he exclaimed in tones that trembled with anger. "Not content with poking your umbrella into me on the street you make a jest of it in public. The rudeness and flippancy of the rising generation is past endurance," and choking with indignation and soup the old man hurried out of the dining room.

There was an appalling silence for some minutes. The Bank Clerk's hilarity was already two miles and a half away, and still moving sixty miles an hour. At length the Young Lady Boarder said she preferred dark meat, and the Landlady asked everybody to keep their spoons for the next course.

ACCORDING to the San Francisco *Call*, the thought of bequeathing money for a monument to Francis S. Key first came to the late James Lick while attending a theatrical performance in that city. It was in the early days of the rebellion,

when public sentiment in California was divided between the North and South. The orchestra began to play "The Star Spangled Banner," and the stirring melody was almost unheard for a short time in the hissing of a portion of the audience. The loyal portion of the spectators broke out in turn in vociferous applause, and predominated to such an extent as to check and cheer out of all hearing the ill-timed manifestations of displeasure preceding them. This episode made a deep and lasting impression upon James Lick, and he resolved that the author of the song should be honored on the Pacific Coast in a manner in which his native State, Maryland, and her principal city, Baltimore, had then and have since failed to do."

## THE TALE OF A CLOCK.

The handsome Mexican onyx clock which stands in the reception room of the city residence of Mr. George W. Childs, at the southeast corner of Twenty-second and Walnut Sts., has been much admired by the thousands of visitors to that hospitable mansion, few of whom probably know the history of the expensive time-keeper, which is recalled by the death of Le Grand Lockwood in New York. During the Paris Exposition in 1867, Mr. Lockwood, who was a visitor, became especially enamored of this strikingly beautiful clock, whose base, four feet in height, supported a superb silver statuette of Liberty, swinging from one hand a pendulum. Mr. Lockwood, who was then very wealthy, determined to own this clock, and in the auction of exhibited articles bought it, though the Czar of all the Russias, to whom Time was then of moment, was a competitor in the bidding. Safely transported to Norwalk, Conn., Mr. Lockwood's home, the costly time-piece was much admired by the visitors to Mr. Lockwood's house, and by none more than by Mr. and Mrs. G. W. Childs. Several years later, Mr. Lockwood's house and its many articles of virtue were offered for sale, and at the suggestion of his good wife Mr. Childs determined to buy this clock. Arrived at the sale, and the clock put up, Mr. Childs first bid was \$3,000. A stranger sitting immediately behind him raised that \$500. Mr. Childs saw the raise and raised back \$500, when the astonished stranger reaching forward remarked:

"Sir, I come from A. T. Stewart with orders to get that clock, and I must have it."

"I don't care if you come from Golconda," was the reply of the Philadelphian, and he kept raising the bid of his opponent, much to the auctioneer's satisfaction, until he had offered \$6,500, at which figure Stewart's man weakened. Mr. Childs removed the time-keeper to his city residence, where it now ticks and tells that time is flying.

CONFIDENCE between dealer and customer is a grand thing. It's got to have a deeper foundation than that one man has the goods and another wants them. Without seeming censorious, it's got to have a more substantial base than even commercial honesty. That tolerates adulterations of goods, admixtures of poor materials and good, and runs its risks, if needs be, of being found out. If any one in business wants to get firmly rooted in the esteem of those he deals with, he must be ready to go a step farther—be sponsor for what he sells out-and-out, or ready to make it good. Confidence is sure to follow such a course. It may seem like giving a heroic character to business to put it on the same footing as morality, but that's the only price that will purchase the confidence of others. Integrity can't be made two-faced. Young man about starting out in business, ponder this.

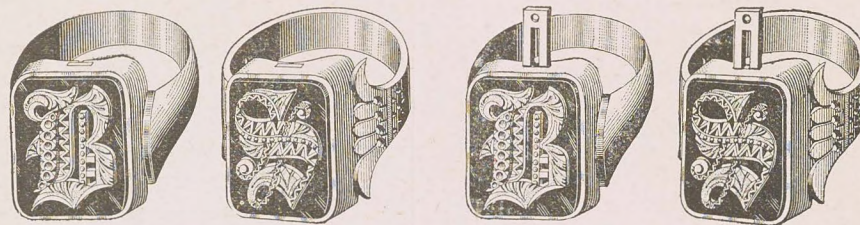
S. C. SCOTT.

Established 1847.

J. T. SCOTT

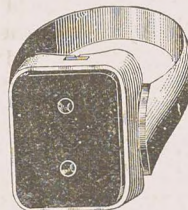
## THE LATEST!

### Ask for the SUCCESS Initial Ring.



Complete Ring.

Part of Prong Exposed.



Ring without Initial.

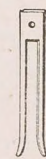


Initials (Front View.)

PAT. NOV. 1886



Initials (Back View.)



Prong.

We are placing upon the market the most simple changeable Initial Ring ever offered to the trade. Send for sample and ask our travelers for them. Patented and made by

**J. T. SCOTT & CO.,**  
No. 4 Maiden Lane, New York.

Jobbers in all kinds of

## AMERICAN WATCHES.

Importers of Swiss Watches,

Including a full line of CHATELAINE WATCHES in Gold, Silver and Nickel

Also a full line of

## DIAMOND GOODS.

Comprising Loose Stones and Mounted in Ear-Drops, Lace-Pins, Scarf-Pins, Collar-Buttons, Fancy and Solitaire Rings.

Sole Agents for Chas. F. Tissot & Son's Fine Movements, fitting the 6 and 16 Size Elgin Cases; also for Nickel Open-Case Roskopf, & Triumph-Roskopf Watches.

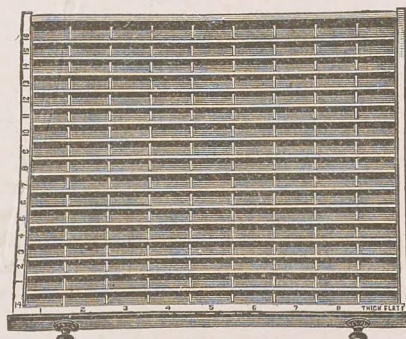
Our Spring Stock will be much larger and more complete than ever offered before.

Would call especial attention to our Full and Complete Line of CHRONOGRAPH WATCHES.

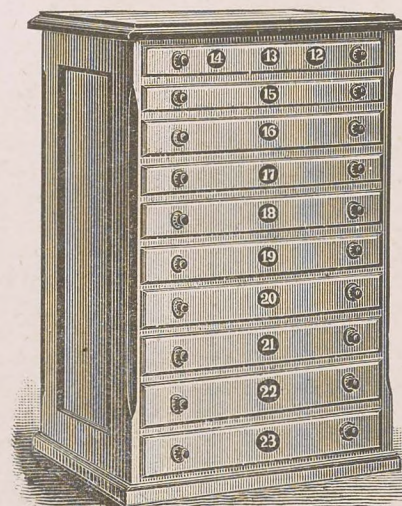
Our Jobbing Department is under our Personal Supervision.

The Julius King Optical Co. have their New York Office in our Store.

## WATCHMAKER'S COMFORT GLASS CASE



Plan of drawers.



Clark's Patent Comfort Glass Case.  
Patent No. 256,640, April 18, 1882.

THIS is the only glass case in use that has ever given perfect satisfaction. Every watchmaker who becomes acquainted with it will have one. We can show abundance of testimony, from those who have used it, in its favor. The glasses stand upon edge and the arrangement is such that it will hold every size and height of Geneva Lunette, Patent Geneva and thick flat (for open face) glasses from 12 to 23 15-16. It contains 1,456 spaces and will hold 17,462 glasses in convenient order, so one is able at once to select the desired size and height of glass, and also make out an order for more glasses when required. The size of the case is 32 1/2 inches high, 22 1/2 inches wide, 16 1/2 inches deep. They are made of black walnut and cherry, hard finished, and of most thorough workmanship, nickel numbers on the front of the drawers and highly ornamental in appearance. Price, \$15.00 each.

CLARK, GIDDINGS & CO., Sterling, Ill.

Manufacturers of Clark's Patent Pendent Bow Pliers, Clark's Patent Simplicity Lamps, and Clark's Patent Ring Rolls. For sale by Jobbers.



## AFTER HOURS.

THE TIME WHEN WE LAUGH AND  
GROW FAT.

Brief sketches of funny things in the jewelry trade. A free for all. Walk in and smoke.

This corner will be devoted to good things, good stories, and gossip, a place to laugh and forget the heavy, dull grind of business. It is well known that jewelers are good story-tellers, and if once in a while one gives us a chestnut, it is usually fresh-roasted, to say the least.

"R. L." tells us a story of a watchmaker for the trade in Chicago, who we will designate as D. Now D., was a first-class mechanic and kept several hands doing such jobs for his country brethren, as they did not care about tackling. Well D., was short handed, as I was saying and advertised for two good workmen. As it happened two young men, who had formerly been with the United States Watch Company, at Marion, N. J., were in Chicago. All the older members of the fraternity, know that ten or twelve years ago, we had a regular craze on so called adjusting and every knight of the peg, wood and chalk brush was an adjuster. Of course D. had several applicants and our two young friends among the rest. When it came their turn to compete, the talking man of the two, thought he would paralyze D. by informing him that they were adjusters from Marion. "Well" said D., while a comical expression came over his face, "never mind about the adjusting, all I want is to make 'em run, and I'll tend to the 'adjustment' myself." It is needless to say the adjusters smelt a mouse and sloped.

Conical Pivots tell us a good one of "S," a skillful old German watchmaker here in our Quaker City. As is often the case, a man from the street would come in with a watch which had very likely been botched up by some soft solder artist, with a statement about like this: "Mr. S, my watch stops; there cannot be much the matter with it. I just had it cleaned."

Now S. was an irritable old Teuton, and anything like this set him on his ear. "Dere's notings de matter mit de vatch only it von't go. Dere's notings de matter mit de man only he's det. Vat de debbil does you brings your vatch here for, if dere's noting de matter mit him. No, I dells you shust vat you do. You tooks your vatch to some dandy feller, who dalks so nice und he dells you your frissly peg is busted und cost two dollar und vifty cent. You pays de money und now you come and say: 'Mishter S, you vas a goot Dutchman, make my vatch run for noting.' No! no! I make your vatch run, but you pays me too."

PHIL. S. vouches for the following and encloses the workman's card which he now issues to what Phil calls a credulous community. The true (according to Phil) history of this "celebrated watchmaker" is about this: He worked at shoe making until he got so blind he could not see to insert the bristles of his waxed end into the holes he made with his awl. He concluded he would give up this pursuit, and take to the profession of fiddling, continuing this for a number of years; in fact, until he could not properly finger the strings of his violin, and then took to watchmaking. Here is his card: "—, The Celebrated Watch Maker. All work warranted. Particular attention to fine and complicated watches."

THAT was a very appropriate wedding in Boston last week, when a Cincinnati man married a Boston girl. It was a union of pork and beans.

## HOW HE ENJOYED SUNDAY.

It was a boy of seven who provided last Sunday's fun in the pew of a city church. His elderly father has been gouty this spring, and had a lot of leeches applied to his refractory leg. After the innocent leech had been used, the old man put the little party into a fish globe and made what he called a natural barometer. He drew my attention to their peculiarities. When the weather was fine the leeches were near the top; when it was stormy they hugged the bottom; when it was windy they went rattling around like circus riders. One particularly large and active leech was the boy's favorite. Johnny fished him out with a paper cutter, and named him Billy. He fed him on the back of the cook's neck, and on his oldest sister's pug dog. So Billy waxed lusty and very hilarious. After hours of play, Billy would be put back with his relations in the fish bowl. Sunday found the small boy feeling at peace with all the world, and anxious to share its pleasures. To that end, Billy was fished out of the bowl, imprisoned in a pomade pot and carried off to church.

The boy's two maiden sisters were taking in all the bonnets, and thinking how sweet their family doctor looked in a check suit, when they became conscious that their little brother was groping round their feet.

"What is the matter with you?" snapped the elder; "sit up on your seat."

"I don't want to," whimpered the boy, "I want to find it."

"Wait till after church," suggested the other lady, supposing it was a China alley or agate.

"It'll be lost forever if I wait?" persisted sonny, "an I wouldn't lose him for a dollar."

"What is it you have lost?" asked the elder, as she grabbed the boy's hand, that was traveling carefully up her gaiter.

"Billy; he's been gone some time," said the boy almost crying.

"Billy, the leech?" gasped the horrified woman.

"Do yer spose it's Billy the Kid?" sneered the youngster.

Pale with horror and all the ghastly possibilities of the accident, those two women rose and pushed out of church. The boy made a rapid search of the hassocks and carpets, and, with a sort of instinct, rushed after his sisters. He overtook them in the vestibule. Mary was clenching her clothes in the neighborhood of her waist, and holding the garments as far away as possible. Martha was asking her in broken tones if she thought she'd got it.

"Let me see," said the youngster, "you ain't so apt to have it as Martha, for she was next to me when Billy skipped."

Martha, thus encouraged, gave a yell and clutched her bustle.

"Oh, dear! Something just stuck me like a pin," sobbed the disturbed maiden.

"Billy for a doughnut," shouted the wretched boy, as the baize doors swung open and the people began to pour out.

"What's the matter?" asked an anxious parishioner of the disturbed maidens.

"They're hunting Billy, my pet leech," explained bub; "I lost it loose in church."

Amid great laughter the girls escaped and flew on the wings of fear for the paternal mansion. In less time than they ever undressed before, the ladies disrobed and hunted for Billy.

"It must be back in the church," groaned the lad, as his sisters came down stairs after the unsuccessful search.

Twenty minutes later, when the family and a few friends were sitting down to luncheon, there came a triumphant howl from the boy: "Unbutton me quick—it's Billy—I had him myself all the time!" And, sure enough, Billy had ridden back in safety in the seat of Johnny's little knickerbockers.



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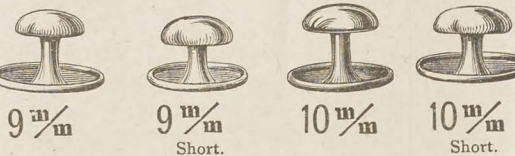
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